

Kent Historic Landscape Characterisation

Final Report

Volume 1: Main Report

Authors

Andrew Croft
Julian Munby
Matthew Ridley

Kent County Council

English Heritage

Oxford Archaeological Unit
May 2001

Table of Contents

Volume 1 - Main Report Text

Chapter 1	Introduction
Chapter 2	Approach and Methodology
Chapter 3	Description of the Historic Landscape Character Areas of Kent
Chapter 4	Commentary on the Historic Landscape Types of Kent
Chapter 5	Comments on Settlement Patterns and Landscape Character
Chapter 6	Time-depth and Landscape Change

Volume 1 - Main Report Text

Volume 2 - Historic Landscape Type Descriptions

Text Descriptions
Map Extracts

Volume 3 - Illustrations

Figure 1.1	Geological Map of Kent (from Campbell 1962,491)
Figure 1.2	Relief Map of Kent (from Campbell 1962,490)
Figure 3.1	Historic Landscape Character Areas
Figure 3.2	Proportions and Percentages of Main HLTs for Kent
Figures 3.3 to 3.19	Proportions of Main HLTs for the HLCAs
Figure 4.1	Assarts
Figure 4.2	Fields Bounded by Tracks
Figure 4.3	Wavy Bounded Fields with Ponds

Figure 4.4	Regular Fields
Figure 4.5	Wavy Bounded Fields and Irregular Straight Bounded Fields
Figure 4.6	Woodland
Figure 4.7	Downland, Commons and Rough Ground
Figure 4.8	Horticulture
Figure 4.9	Coastal and River Valleys
Figure 4.10	Reclaimed Marsh
Figure 4.11	Settlement, Parkland and Recreation
Figure 4.12	Industry, Inland Communication and Military and Defence
Figure 5.1	Parish Boundaries in Relation to Historic Landscape Types
Figure 5.2	Parish Boundaries in Relation to Historic Landscape Character Areas
Figure 5.3	Parish Boundaries in Relation to Settlements
Figure 6.1	Historic Landscape Time Depth to Early Post-Medieval
Figure 6.2	Historic Landscape Time Depth to Early 19th-Century
Figure 6.3	Historic Landscape Time Depth to Late 19th-Century

Chapter 1

Introduction

Background	1
Principles	2
Approach	2
Geology and topography in Kent	4
Archaeological and historical landscape background	5
The study of the Kent landscape	6
Acknowledgements	9

Background

- 1.1 Oxford Archaeological Unit (OAU) was commissioned in the winter of 1999 by Kent County Council (KCC) and English Heritage (EH) to undertake an Historic Landscape Characterisation of Kent, including the area presently covered by the unitary Medway authority, but excluding the London Boroughs in the former county.
- 1.2 This assessment was designed to enhance the current landscape characterisation of Kent and forms part of English Heritage's programme of assistance to local authorities in the production of Historic Landscape Character Assessments.
- 1.3 The report is divided into two volumes to promote ease of use. Volume One is the main report and covers methodology, findings and discussion, together with a selected bibliography and an associated bound volume of figures. Volume Two is a supplementary appendix describing the Historic Landscape Types (HLTs) developed for and during the study. These are supported with extracts of mapping demonstrating the topographical characteristics of the HLTs.
- 1.4 The approach to this project is broadly based on the experience of completing a more intensive programme for Hampshire County Council. This had, in turn, drawn on earlier models created for Cornwall, Avon and the Cotswolds AONB (Area of Outstanding Natural Beauty).
- 1.5 The above projects were based on the conclusions and findings reached by the English Heritage Historic Landscape Research Project on approaches to Historic Landscape Assessment as carried out by OAU and Cobham Resource Consultants in 1993–4 (Fairclough 1999). This project forms part of the continuing process of historic landscape characterisation currently being supported by English Heritage.
- 1.6 The primary aim of the Kent Historic Landscape Characterisation project was to produce a digital map of Kent's Historic Landscape Types with associated explanatory text, that would:
 - enhance the formulation of development plans, structural planning programmes, development control and conservation activities.
 - establish a framework, in conjunction with the complimentary county-wide landscape assessment, for future historic landscape assessment and research activities within Kent.
- 1.7 The assessment was designed to be compatible with the county's Geographical Information System (GIS) and hence has an interactive element and will be available for a number of uses, including the county's Sites and Monuments Record (SMR).

Principles

- 1.8 Historic landscape characterisation is about recognising the ways in which the present physical landscape reflects how people have exploited, changed and adapted to the physical environment through time, with respect to different social, economic, technological and cultural factors.
- 1.9 A core premise against which this study has been developed is the recognition that landscape is dynamic and constantly changing in a manner that reflects the immediate preoccupations, future aspirations and past activities of societies and individuals.
- 1.10 The current key policy issues are broadly focused on how our present-day society wishes to create and influence the direction and pace of future change, in such a way as to enrich the present and future physical, social, economic and cultural environments, whilst maintaining recognisable and tangible links with our shared past.
- 1.11 Historic landscape character is, therefore, partly about the identified characteristic patterns of change and the important relics of past change, and also, partly, about how the resultant pattern of physical features in the landscape vary from one locale to another. Such patterns can be seen to reflect a complex combination of local, regional, long- and short-term socio-economic factors, and the varied underlying influences of the physical environment, history, culture and tradition.

Approach

- 1.12 Kent has already been subject to conventional landscape characterisation programmes, some still on-going, and also to ecological and historic assessment and characterisation programmes, both county-wide and within smaller defined areas such as Romney Marshes and Medway. These have been undertaken over a period of time by a range of organisations for a variety of purposes. Whilst this provides a diverse and rich source of perspectives on the subject of Kent's historic character and development, there is the danger that the addition of further perspectives could lead to increasing confusion if previous work is not taken into account.
- 1.13 The approach adopted here is firmly based on recognising historic landscape characterisation as a process of enrichment and refinement of landscape characterisation, rather than as a separate or rival approach. Ideally it should enhance the traditional approaches by placing an emphasis on time-depth and on how different areas reflect varying patterns and rates of change.
- 1.14 A source of difference between the two approaches is that the method of historic landscape characterisation undertaken here is desk-based, using maps as the primary reference source. This differs significantly from conventional landscape assessment, because it has a solely 'vertical' rather than a primarily 'horizontal' viewpoint. The former tends to produce results

which are harder to appreciate and experience on the ground but which are nonetheless valid. The approach allows greater attention to be given to broader temporal and spatial factors. These relationships tend to reflect wider changes and subtler variations in the landscape related to societal and cultural concerns, rather than the localised patterns that can emerge through more conventional approaches based upon actual experience of the physical landscape.

- 1.15 This seeming incompatibility in fact leads to the emergence of a dynamic and interactive relationship between the two approaches, and hence between this study and past work. Previous completed work provides both part of the foundations on which this study builds, and also a sounding board against which to test and compare results. This means that differences arising from the historic landscape approach can be distinguished from minor discrepancies caused by differing approaches.
- 1.16 As well as discussing and outlining particular aspects and trends of the historic character of the landscape and its development within Kent, the study also outlines areas where future research and investigation may be considered desirable to enhance current knowledge.
- 1.17 A significant part of the project has been the definition of a series of 34 Historic Landscape Character Areas (HLCA) (see Chapter 3 for details) defined by analysing distinctive patterns and groupings of Historic Landscape Types (HLT). These have been created without reference to any other form of landscape character analysis or assessment, as requested by KCC. The HLCAs represent a new definition of the Kent landscape based on an understanding of the development of the historic character of that landscape.
- 1.18 Any confusion with names and locations is regrettable but the prefix HLCA is associated with areas defined by historically derived landscape types and by no other considerations. All references to character areas defined by this project are prefixed by the HLCA number and title.

Geology and topography in Kent

- 1.19 The topographic formation and soil characterisation of Kent is broadly based on its underlying geology which guides, but does not govern, the physical environment of the county.
- 1.20 *Kent is an area of sedimentary rocks laid down partly in freshwater and partly in marine conditions during the Cretaceous and Tertiary Periods. Earth-movements culminating during the Miocene period which produced the mountain chains of Southern Europe also affected Southern England and folded these sediments into a large dome-shaped structure, actually a compound anticline, the Wealden anticlinorium, and two complimentary basins, or compound synclines, the London Basin and the Hampshire Basin. Subsequent erosion, the development of the Thames Estuary and associated drainage systems and the formation of the English Channel have resulted in the pattern of rocks shown in the geological map of Kent' (McRae 1973, 9) (see Figure 1.1)*
- 1.21 The county comprises approximately nine formations running from east to west. These are (from the north) the London Clays, the Thanet Beds, the Chalk, the Upper Greensand, the Gault Clay, the Lower Greensand, the Wealden Clay, the Wealden Sandstone and the alluvial deposits of Romney Marsh (Everitt 1986, 44). The surface geology is somewhat more complex (see Figure 1.1) with significant deposits of clay-with-flints and alluvium spread across the northern half of the county.
- 1.22 The county can, however, be broken down into a series of seven recognisable and definable topographic areas based on the geology. These are:
- the London Clays and Alluviums of the northern part of the county
 - the small outcrop of chalk in the Thanet area
 - the North Downs with their chalk base overlain with extensive deposits of clay-with-flint
 - the Greensand area based on Lower Greensand deposits
 - the Low Weald on the Wealden Clay
 - the High Weald on the Tunbridge Wells Sands and Wadhurst Clays
 - the Romney Marsh with its alluvial and blown sand deposits.
- 1.23 The relief (see Figure 1.2) broadly corresponds with these areas in terms of definable extents. In broad descriptive terms, from north to south, the London Clays and Thanet chalk outcrop are relatively flat, then the land rises to the north up the North Downs in a relatively steady manner. The boundary between the North Downs and Greensand area is marked by a steep southerly facing scarp slope, the Gault Clay Vale. The descent to the Low Weald is marked by a less dramatic but equally convoluted scarp slope with a southerly aspect. The High Weald rises relatively coherently from the Low Weald but is dissected by numerous valleys and alluvial channels. Finally, as expected, the Romney Marsh area is flat.

Archaeological and historical landscape background

- 1.24 Kent has an extremely long record of occupation by hominid species, stretching back to the Palaeolithic at sites such as Swanscombe, where the remains of an early hominid were located in close conjunction with a series of worked flint tools of the Acheulian type (Wymer 1982, 9). The northern part of the county has also produced numerous hand axes from this and earlier periods, generally from the coarse river gravel deposits.
- 1.25 There is considerable evidence from across the north of the county for Mesolithic activity in the form of flint tool deposits, often from dredged river channels but also from possible settlement and working-floor sites. The Neolithic period is also relatively well represented, with notable concentrations of archaeological material along the edges of the North Downs, on the Greensands, near Maidstone, and also in the Wye Valley. The North Downs contain a cluster of megalithic structures, whilst the Wye valley contains three earthen long barrows. Numerous find-spots from other areas of Kent date from this period and the coastal regions at the eastern end of the North Downs also possess a significant clustering of sites.
- 1.26 Later prehistoric periods, the Bronze Age and Iron Age, are well documented in the northern part of the county on the clays and alluvium north of the North Downs and along the Greensand areas. Evidence for occupation on the High Weald is limited, during this period, to a cluster of Iron Age sites just outside the Kent border to the south-west. Overall the majority of the county was utilised and occupied during later periods of prehistory and these settlements and landscapes formed the basis for the continued occupation of the region.
- 1.27 The Romano-British period is extremely well represented and studied in Kent with major sites at Canterbury, Rochester and Dover. A large part of the county would have been utilised during this period for permanent physical occupation; this seems to have focused on the major arterial routes that run east-west across the county, including Watling Street. Significant areas of woodland still existed, most probably on the clay soils.
- 1.28 The settlement of Kent in the Anglo-Saxon period is represented by many cemeteries but all too few settlement sites. An element of persistence rather than continuity may account for the use of Roman roads and towns, but the landscape was opened up in new ways with long-distance north-south links between Wealden wood pastures and peripheral settlements that have left their mark in the grain of the landscape. The division of the county into 'lathes' was also a reflection of the connections between Wealden pastures and their parent settlements. In the appearance of parishes and some nucleation of village settlement by the late Saxon period, Kent was similar to other parts of southern England. However, Kent was strikingly different from other parts of southern England in its lack of the open field systems that were being developed alongside villages elsewhere. It is not clear whether this is due to pastoral traditions and a distinct inheritance custom (gavelkind) or to the complexities of Kent's peninsular geology, and it remains a topic for further research. Later medieval expansion and prosperity is reflected in the large number of timber-framed farmhouses, as the Wealden pastures were opened up for farming and industry, and encouraging the growth of towns. It is

the landscape of this developed medieval economy that has formed much of the enduring settlement and landscape patterns, especially in the Weald.

- 1.29 The villages and communication systems of the medieval period were to form the lasting framework of the county until the spread of the railways. Nonetheless within this stable structure considerable change did take place. There were major changes following the Dissolution, with the redistribution of much church land. Other developments included the rise and decline of industries such as iron working, the specialist hop and fruit farming that were partly influenced by the proximity to London, coal mining and the riparian industries, related to naval defence and armaments. Finally, the erratic stages of railway development and the needs of road users to reach Continental ports has brought back to Kent some of the east-west linearity that it had lost with the decline of the Roman Empire.

The study of the Kent landscape

- 1.30 There is a long tradition of the study of the Kent landscape, and it will be useful to draw together some of the key works, and to outline some of the themes that have been treated.
- 1.31 If William Lambarde stands at the fountain-head of Kent history, with the publication of his *Perambulation of Kent* in 1576, and if Edward Hasted's *History and Topographical Survey of the County of Kent* (2nd ed. 1797–1801) is the one great county history, the subject has to some extent languished in the absence of a complete *Victoria County History* (Yates 1994). However, numerous studies on the history of the county have been published, and amongst these are some that treat the landscape of the county. To the early works mentioned above might be added the Board of Agriculture Survey (Boys 1794) as an important study, but in this short review of the literature of landscape studies, it will not be unfair to concentrate on the major landmarks of 20th-century writing rather than to attempt a comprehensive overview.
- 1.32 Foremost must be the study by Howard Gray of Harvard on *English Field Systems* (1915), which for the first time mapped the absence of two and three-field systems from East Sussex, Kent and East Anglia. He was able to demonstrate from his detailed study of early modern maps and terriers that, despite the absence of such field systems, there was abundant evidence for intermixed arable strips in discrete fields or *juga*. He showed that these were often rectangular (unlike the furlongs of the Midland open fields) and associated (like the Midland virgate) with fiscal arrangements. Although initially single holdings of a named individual, they were subject to repeated subdivision in the medieval period (arising from the custom of gavelkind) (Gray 1915, 272–304). Additional documentary evidence for the organisation of landholding was provided by publication of the Bilsington terrier (Nielson 1928).
- 1.33 Although the parish survey volumes of the VCH were abandoned there was a complete series of volumes covering topics such as archaeology, agriculture and industry (Page 1908, 1926, 1932). The completion of parish and manorial histories by a revived VCH would be an essential prerequisite for any proper understanding of the history and landscape of Kent.

- 1.34 The relationship between pastoral patterns and Kentish customs was explored further in Jolliffe's famous study which linked Kentish singularity to the Jutish origins of the kingdom of Kent (Jolliffe 1933), and at the same time some important work was achieved on the study of place-names (Wallenberg 1934). It was many years before the detailed local evidence that lay behind Jolliffe's claims was examined in the mapping of the Wealden pastures or 'dens', first from the evidence of the Canterbury estates (Du Boulay 1961), and more widely for the whole of Kent (Witney 1976). It was also some time before further work on place-names was continued (Reaney 1961).
- 1.35 The ecclesiastical estates in Kent have preserved a wealth of documentation that has only begun to be explored. Smith's studies on the economy of Canterbury Cathedral Priory were of importance for revealing the extent of documentation for the enclosure and reclamation of marshland (Smith 1943). There is little doubt that the full potential of such material remains to be exploited and mapped (Smith has but one map). An important aspect that is illuminated by the study of estates is the relationship between different landscapes outside the Wealden pastures; for example many thousands of sheep (important both for their wool and cheese) were bred in one place and fattened in another. The initial study of the Canterbury episcopal estates has also been published, but again leaves more to be explored in the records (Du Boulay 1966). Other studies have remained as unpublished theses (noted in Baker 1973, 377).
- 1.36 National surveys will always have material of relevance, and the original version of the Historical Geography of England (Darby 1948) is still of value despite the publication of a later edition with completely new studies (Darby 1976a–b). The whole direction of English local history was changed with Hoskins's book *The Making of the English Landscape* (1955), which again stressed the singularity of Kent by comparison with southern England, though his reference to the possible existence of open fields in Kent has not been borne out. Hoskins undertook further work arising from the Royal Commission on Common Land in 1955–8 (RCCL 1958) and his separately published account showed that Kent, which had lost many of the commons reported in 1872, had in 1962 80 commons totalling 3,449 acres. These were concentrated in the west of the county (some now in London boroughs). There were 37 village greens throughout the county (Hoskins and Stamp, 1963, 31, 110, 145–8, 291–4).
- 1.37 A study of Kent field systems was taken up by Nightingale, who identified an area near Rochester with a possible surviving Roman field layout (Nightingale 1952), and observed the relationship between field shapes and plough types (Nightingale 1953). An important series of studies was published by Baker arising from his 1963 thesis on 'The Field Systems of Kent' based on early modern maps and surveys (Baker 1963, 1965a–b, 1966), culminating in an overall survey (Baker 1973). The major result of these investigations was the realisation that 'open' fields in Kent were not cultivated or grazed in common, that it was the inheritance customs (gavelkind) that had had a significant role in producing subdivided fields, and that in any case there was a great variety of field types to be found in the landscape regions of Kent. Indeed, Baker suggested that such was the plurality of types that Gray's notion of 'the Kentish field system' had outlived its usefulness.

- 1.38 Research on the agriculture and economy of Kent in this productive decade included the estates of Canterbury, noted above (Du Boulay 1966), the 17th-century scene (Chalklin 1965), an overview of early modern farming in the south-east (Thirsk 1967) and fruit-growing (Harvey 1964). The final cornerstone was the mapping of the Domesday evidence (Campbell 1971).
- 1.39 A general survey of the agriculture of the county had been produced by Garrad (1954), and a further study of the Kent landscape was produced for the meeting of the British Association for the Advancement of Science in Canterbury in 1973 (McRae and Burnham 1973). As with other BAAS productions, this is a very convenient summary of the background of soils and geology, fauna and flora, agriculture and horticulture, industry, transport and settlement, population and building. Not only is the book illustrated with numerous maps but it also contains a comprehensive bibliography. It also has the added importance of having reported the contemporary status of hop growing, for example, where the picture has now changed beyond recognition. While Kent has never had an overall landscape history like that for Sussex (Brandon 1974), a major study of early settlement appeared (Everitt 1986), following on from an earlier study of the landscape (Everitt 1977). The earlier of these is perhaps the easier to assimilate, but the later study has a depth that will inform all later work, while the summary of the way in which Kent is (or is not) different provides the key the significance of Kent when seen in relation to other English regions.
- 1.40 General surveys of agrarian history in the south-east have continued to appear, full of original material for Kent, if lacking in local landscape detail. These cover the earlier medieval (Brandon 1988), later medieval (Mate 1991a–c) and later post-medieval periods (Short 1984), completing the series begun by Thirsk (1967). A remarkable project, based on a single source, has been the study of all the Tithe Maps and files for all of England, and the resultant atlas has included detailed maps for each county showing the distribution of crops and crop yields for those areas covered by the surviving sources (Kain 1986); this follows an earlier study (Kain 1974).
- 1.41 One of the most productive enterprises of recent years has been the concentration of joint effort in unravelling the complex relationship of land, water and settlement on Romney Marsh, where a series of publications under the aegis of the Romney Marsh Research Trust has resulted in no less than 43 papers on all aspects of the natural history and archaeology of the area (Eddison et al. 1988, 1995, 1998). Work on Romney has been greatly helped by the existence of the soil survey for the marshland (Green, 1968), while a pioneering study was written by Brooks (1981). Detailed study of local sources will continue to produce other studies of economic history, such as the recent study of Wealden industry in the 16th century (Zell 1994) which have obvious relevance for the changing landscape.
- 1.42 Work on Kent's buildings, long continued by numerous individuals, has seen the production of two recent studies which relate to landscape regions (Quiney 1993, Pearson 1994). The place of churches and urban origins in the landscape has also been examined by Tatton-Brown (1988a, 1988b).

- 1.43 At the same time as individual *pays* have received attention, on a wider scale regional overviews of the history and archaeology of the south-east have been provided, allowing a broader and more realistic view of such topics as Anglo-Saxon settlement (Drewett et al. 1988), or the relation of the south-east of England to London (Brandon & Short 1990). But if the 20th century has filled a shelf with general, regional, and county surveys, the time has perhaps arrived for more reconstruction (in maps and histories) of the lost landscapes of parishes, manors, and *pays*, so that the facts on the ground can finally provide a basis for a sound generalisation.

Acknowledgements

- 1.1 The study has been jointly funded by Kent County Council (KCC) and English Heritage (EH).
- 1.2 We would like to thank the members of the supporting bodies for their interest and support as well as KCC for the provision of useful source data, including all the digital mapping and characterisation data. Their helpful suggestions, guidance and constructive criticisms were also much appreciated.

Chapter 2

Approach and Methodology

Mapping sources and base date	1
Outline rationale for the definition of Historic Landscape Types	1
Historic Landscape Types - listing	2
Methods of identifying and mapping Historic Landscape Types	5
Project implementation: methodology, structure and IT facilities	13

Mapping sources and base date

- 2.1 The sources used in the compilation of the assessment are referred to below, and in more detail in the definition of the Historic Landscape Types (HLTs) presented in Volume 2.
- 2.2 The mapping was carried out using a combination of 1997 'Explorer' series OS 1:25,000 maps and digital base map data, as supplied by Kent County Council, in the form of OS 1:10,000 raster Landline data.
- 2.3 The combination of the 1997 Explorer and 1998/9 1:10,000 raster data gives a base date of c.1997 for the project.

Outline rationale for the definition of Historic Landscape Types

- 2.4 The rationale adopted for the definition of Historic Landscape Types incorporates a range of principles and practical considerations. These were as follows:
 - the assessment should characterise the present-day landscape.
 - the whole county should be mapped seamlessly.
 - the historic characteristics recognised should reflect different types of human interaction with their environment.
 - such interactions should be capable of being mapped reasonably comprehensively as distinct *areas* of landscape (this effectively excluded coverage of linear communication routes and religious complexes).
 - the assessment should incorporate distinctions between landscape types which reflect change through time based on current understandings of the relative chronology of landscape types such as field systems and woodland.
 - the assessment should be capable of mapping areas not only according to current land use characteristics, but also relict land use where this has left a substantial impact on visible landscape character.
 - conversely, the assessment should not map characteristics that can only be derived from historical or archaeological evidence (e.g. evidence of subsoil archaeology such as Roman field systems, or distributions of sites and monuments).
- 2.5 In respect of the last point, there are obviously legitimate areas for future research comparing and analysing the distribution of archaeological features, and of historically recorded areas of landscape change or tenure in relation to the mapped Historic Landscape Types.
- 2.6 In defining the range of Historic Landscape Types to be mapped, no limit was set on the number of types that might be defined. The approach to the final decision of what range of types should be defined was pragmatic based on the following criteria:
 - the morphological, spatial, functional or chronological distinctions within the types should be useful for analysis at a range of scales from the countywide approach down to more local analysis, but the scale of the mapping undertaken during the project can not be expected to provide high level localised detail

- the types should be identified and mapped reasonably easily using the identified sources
- there should be a sufficient range of types to avoid having to make difficult choices about grouping areas into inappropriately general categories, hence losing useful distinctions
- there should not be so many types that impossibly fine distinctions would be required which may not readily be discerned from the sources utilised.

2.7 This meant that the final definition of Historic Landscape Types to be mapped was based on:

- what would achieve the objectives of the study
- what was comfortable to work with, in terms of the constant choices and decisions needing to be made in the mapping and analytical process.

2.8 A total of 87 Historic Landscape Types were defined and these were grouped into fourteen broad categories and used in the mapping. These are listed below and explained in more detail in the following section. Type descriptions with illustrative map extracts are provided in Volume 2.

Historic Landscape Types - listing

2.9 The Historic Landscape Types used in the mapping are as follows:

1 Field patterns

- 1.1 Small irregular assarts intermixed with woodland
- 1.2 Medium irregular assarts and copses with wavy boundaries
- 1.3 Large irregular assarts with wavy or mixed boundaries
- 1.4 Regular assarts with straight boundaries
- 1.5 *number not used*
- 1.6 Medium to large fields with wavy boundaries
- 1.7 Irregular fields with straight boundaries
- 1.8 Regular 'ladder' fields
- 1.9 Small regular fields with straight boundaries
- 1.10 Medium regular fields with straight boundaries
- 1.11 Large regular fields with straight boundaries
- 1.12 Graded regular fields with straight boundaries
- 1.13 'Prairie' fields
- 1.14 Irregular fields bounded by roads, tracks and paths
- 1.15 Small fields with wavy boundaries
- 1.16 Small wavy bounded fields with ponds
- 1.17 Large wavy bounded fields with ponds

2 Commons

- 2.1 Common heathland
- 2.2 Downland commons
- 2.3 Other commons and greens
- 2.4 Wooded-over commons
- 2.5 Rough ground

3 Horticulture

- 3.1 Orchards
- 3.2 *number not used*

- 3.3 Nurseries with glasshouses
- 3.4 *number not used*
- 3.5 Vineyards
- 3.6 Platt

- 4 Woodland**
- 4.1 Assarted pre-1801 woodland
- 4.2 Replanted assarted pre-1801 woodland
- 4.3 Other pre-1801 woodland
- 4.4 Replanted other pre-1801 woodland
- 4.5 Post-1801 plantations
- 4.6 Pre-1801 scarp and steep sided valley woodland
- 4.7 Post-1801 scarp and steep sided valley woodland
- 4.8 Post-1801 coppices
- 4.9 Pre-1801 coppices
- 4.10 *number not used*
- 4.11 Post-1801 wood pasture

- 5 Reclaimed marsh**
- 5.1 Small irregular enclosures
- 5.2 Irregular enclosures
- 5.3 Small regular enclosures
- 5.4 Regular enclosures

- 6 Downland**
- 6.1 Downland

- 7 Valley floor and water management**
- 7.1 Miscellaneous valley-bottom paddocks and pastures
- 7.2 Valley-floor woodlands
- 7.3 Marsh and rough grazing
- 7.4 *number not used*
- 7.5 *number not used*
- 7.6 Watercress beds
- 7.7 Fishpond, hatchery complexes, natural ponds and lakes
- 7.8 Mills, mill ponds and leats

- 8 Coastal**
- 8.1 Coastal wetlands
- 8.2 Salt marsh
- 8.3 Salterns
- 8.4 Reclaimed land
- 8.5 Harbours and marinas
- 8.6 Shingle
- 8.7 Mud flats
- 8.8 Wave-cut platforms
- 8.9 Sand and dunes
- 8.10 Creeks and fleets

- 9 Settlements**
- 9.1 Pre-1801 scattered settlement
- 9.2 Post-1801 scattered settlement

- 9.3 Pre-1801 common edge settlement
- 9.4 Post-1801 common edge settlement
- 9.5 *number not used*
- 9.6 Post-1801 settlement
- 9.7 Hamlet or village, 1801 extent
- 9.8 *number not used*
- 9.9 Town and city 1801 extent
- 9.10 *number not used*
- 9.11 Caravan sites and holiday chalets
- 9.12 Prisons

10 Parkland and designed landscape

- 10.1 Pre-1801 parkland
- 10.2 Post-1801 parkland
- 10.3 Deer parks

11 Recreation

- 11.1 Racecourses
- 11.2 Golf courses
- 11.3 Major sports fields and complexes

12 Extractive and other industry

- 12.1 Active and disused chalk and stone quarries
- 12.2 Active and disused gravel and clay workings
- 12.3 Industrial complexes and factories
- 12.4 Modern large-scale industry
- 12.5 Reservoirs and water treatment
- 12.6 Dockyards
- 12.7 Abandoned industry

13 Inland communication facilities

- 13.1 Station and sidings
- 13.2 *number not used*
- 13.3 Airfields
- 13.4 Motorway service areas

14 Military and defence

- 14.1 Prehistoric and Roman
- 14.2 Medieval
- 14.3 Post medieval (1500–1830)
- 14.4 19th century (1830–1914)
- 14.5 20th century (1914–)

- 2.10 All entries marked *number not used* were initially utilised but removed during the early stages of the study when they were determined to be extraneous to requirements.

Methods of identifying and mapping Historic Landscape Types

Field types

- 2.11 The OS 1:10,000 digital raster data and the 1997 OS 1:25,000 ‘Explorer’ maps formed the basis of the enclosure mapping where identification was primarily by means of visual observation of enclosed shape and size of fields.
- 2.12 The classification was developed as follows:
- consideration of standard interpretations of field pattern morphologies (e.g. Taylor 1975)
 - an initial appraisal of the variety of patterns discernible on current 1:25,000 and 1:10,000 maps
 - a more detailed assessment of six pilot areas
 - distinctions that emerged during the course of the mapping of the types.
- 2.13 The classification took account of both shape and boundary form. It is generally intended to reflect a combination of factors that have affected field patterns, so far as these can be detected from their morphology alone. These include their age, topographical context and origin in relationship to woodland clearance, previous field systems or downland and other land-use activities.

Assarts

- 2.14 Old Assarts, Historic Landscape Type (HLT) 1.1–1.3 were identified as enclosures of irregular form with wavy boundaries. They form a highly irregular field pattern with no discernible major common boundaries within the pattern. Assart fields usually contain scattered small woods and copses and may have associated assarted woods.
- 2.15 HLT 1.4 (Regular assarts with straight boundaries) was used to distinguish assarts with evidence of later modifications or origins. It includes assarts with a significant proportion of straight boundaries, which are thought to reflect 19th-century or later modification of earlier assarts, or in some cases 19th-century assarting in the same manner as earlier assarts.
- 2.16 In addition, this type includes some areas of fields where there is clear map evidence of recent clearance of woodland where this has not been replaced by regular and rectilinear style systems. These fields were often distinguished by the association of woodland showing evidence of being assarted since the OS 1st edition 1” series map, for most of the county dated 1801.
- 2.17 The older Assarts (1.1–1.3) were subdivided into three sizes: up to 2–3 hectares, 2–3 to 12 hectares and over 12 hectares. In practice the field patterns were composed of a variety of field sizes, but it was relatively easy to decide which of these ranges was predominant. This

was not done for HLT 1.4 (regular assarts) as it would have generated an over-complicated set of criteria.

Fields with wavy boundaries (HLT 1.6)

- 2.18 Field pattern HLT 1.6 consists of fields whose boundaries are wavy in form but whose overall shape is more regular than that of assarts. They are usually larger and were further distinguished from assarts by the lack of scattered small woods and copses typical of assart field patterns.
- 2.19 HLT 1.15 (small fields with wavy boundaries) is a small version of HLT 1.6, and is composed of moderately regular fields with wavy boundaries, though these fields are only about 10ha in area.

Irregular fields bounded by roads, tracks and paths

- 2.20 These fields are irregular in pattern and shape, their boundaries being defined by public footpaths, bridleways and roads or other tracks and paths that are not rights of way. The pattern almost entirely lacks internal boundaries dividing the fields into enclosures, and this is their chief distinguishing characteristic. Occasional boundaries may be straight or wavy. It is possible that some are the result of boundary loss (i.e. 'prairie' types, HLT 1.13 – see below). However, they mostly lack the remnant boundary features characteristic of 'prairie' fields and the density of tracks and roads suggests that they derive from the enclosure of downland by the simple expedient of using the numerous downland tracks as boundaries.
- 2.21 A version of this type of pattern was also found to occur in the north-western area of Kent in HLCA 5 (North-Western Foothills), which may reflect a rather different origin, possibly 20th-century market gardening.

Regular 'ladder' type fields

- 2.22 Regular 'ladder' type fields (HLT 1.8) consist of long, unbroken, wavy parallel boundaries (often tracks, roads or footpaths), with the area between them sub-divided into fields by regular straight boundaries. The long wavy parallel boundaries usually made this category readily distinguishable from other types.

Regular fields with straight boundaries

- 2.23 These field patterns are characterised by straight, probably surveyed, boundaries and are usually regular shapes, often rectilinear when topography is not a key influence. In many cases they derive from 19th-century enclosure of previously open land although they may also represent the reorganisation and rationalisation of smaller more irregular fields. This distinction is not always evident.

- 2.24 They were divided into three size categories: less than 6–8 hectares (HLT 1.9, small), between 6–8 to 20–25 hectares (HLT 1.10, medium) and over 20–25 hectares (HLT 1.11, large). Exact size categories proved impractical. As for assart fields systems, individual field size varied within particular pattern and identifying a predominant field size was more practical.
- 2.25 A fourth category of graded regular fields with straight boundaries (HLT 1.12) was noted as a specific category where the full range of size categories is represented, increasing in size with distance away from a settlement. This type of field pattern was generally considered to terminate at a parish boundary, in order to define its extent in relation to other enclosed types. Field systems comprising a mixture of enclosure sizes not adhering to this particular gradation of size were assigned to predominant sizes.
- 2.26 A specific pattern of irregular rectilinear fields with straight boundaries is represented by HLT 1.7. They have a distinctively irregular, rectilinear pattern of interlocking shapes.

Prairie fields

- 2.27 These fields (HLT 1.13) are those with at least one boundary over 1 km in length and which are the result of either very large rectilinear enclosure or more usually extensive boundary loss. Due to the size of these fields they were usually mapped, even when only one example was identified. Distinguishing characteristics include the presence of remnant field boundaries located within their extents.
- 2.28 In general this category occurs only within patterns of fields that are already quite large, and while they most probably originate from rectilinear-type fields, there are examples that seem likely to have originated from pre-19th-century types (e.g.. HLT 1.6, medium to large regular fields with wavy boundaries).

Fields with ponds

- 2.29 This distinctive category of field type is recognised by the presence of sub-circular water filled pits within their bounds of the field, often towards the edges. Distinction between the two types, HLT 1.16 (wavy bounded fields with ponds) and HLT 1.17 (large wavy bounded fields and ponds) was made on grounds of field size and the presence of isolated ponds in the middle of fields indicating potential boundary loss in the later sub-type.
- 2.30 It is felt that these ponds were often created as a consequence of the practice of marling. This type of field pattern is common in HLCA 14 (Southern High Weald), HLCA 15 (The Marling Weald) and to a lesser extent in HLCA 1 (Western Weald) and HLCA 7 (Central Low Weald).

Commons

- 2.31 Commons were identified using the digital information supplied by Kent County Council alongside data gathered from standard OS 1:25,000 and 1:10,000 sources. Wooded-over commons (HLT 2.4) were identified as those which specifically still exist as common land, rather than ex-common land which had reverted to woodland.

Horticulture

- 2.32 Horticulture types were mapped directly from the OS 1:10,000 base maps, and were identified by the presence of orchard (HLT 3.1) or glasshouse symbols (HLT 3.2).
- 2.33 There may be more extensive areas of horticulture, either in small fields e.g. HLT 1.16 (wavy bounded fields with ponds), 1.7 (Irregular straight bounded fields), 1.9 (Small regular fields with straight boundaries) or large open areas on low ground e.g. HLT 1.10 (medium regular fields with straight boundaries), 1.11 (large regular fields with straight boundaries) or 1.15 (small rectilinear fields with wavy boundaries). Overall, the general horticultural category is thus likely to be under-represented, and the methodology has not revealed the current extent of hop production.

Woodland

- 2.34 Three sources were used to identify the various woodland types: the OS 1:10,000 maps, Kent Inventory of Ancient Woodland (KCC and English Nature 1995) and OS 1st edition 1" maps.

Pre-1801 woodland

- 2.35 Such woodland was identified on the basis of its presence on the OS 1st edition 1" map and by being recorded as ancient woodland in the Ancient Woodland Inventory (KCC and English Nature 1995). Absence from the Ancient Woodland Inventory does not, however, mean that a wood is post-1801, since the official definition of 'ancient' is pre-1600, and it would be classified as pre-1801 if shown on the OS 1st edition 1" map. If a wood is absent on the 1st edition 1" map, but recorded as ancient woodland in the Inventory, the Inventory was taken as being correct.
- 2.36 Where pre-1801 woodland was not assigned to one of the more specific morphological or land use-related types below, it was mapped as 'other pre-1801 woodland' (HLT 4.3) or if replanted, HLT 4.4 (replanted other pre-1801 woodland). Post-1801 woodland (HLT 4.7) or plantation (HLT 4.5) was identified as being those areas that were present neither on the Ancient Woodland Inventory nor on 1st edition 1" map.
- 2.37 Where possible woodland was further subdivided based on its land use or socio-economic associations, as follows:

Replanted woodland (HLT 4.2 and 4.4)

- 2.38 This type was identified by being recorded as replanted in the Ancient Woodland Inventory, and/or by the presence of conifer symbols on the OS 1:10,000 maps.

Assarted woodland

- 2.39 In general, woods were deemed assarted, e.g. HLT 4.1–4.2 (assarted pre-1801 woodland and replanted assarted pre-1801 woodland) if their outline was sufficiently irregular, showing the appearance of being encroached upon. This was most evident where they were adjoined by assart field systems. However, it is clear that often the field systems could have been rationalised up to the woodland edge at a later date, and the presence of assarts was not seen as necessary for this identification.
- 2.40 Definite evidence of recently cleared woodland (often in effect clearly assarted in its shape) was clear if the extent of a wood had decreased from that indicated on the 1st edition 1" map as compared with the current 1:10,000 map.

Scarp and steep valley-side woodland

- 2.41 HLT 4.6–4.7 were identified on the basis of their topographical location, normally on chalk or Greensand areas, being generally linear irregular features situated on steep hillsides and scarps.

Wood pasture

- 2.42 Wood Pasture, HLT 4.11 (Post-1801 wood pasture) was identified from the current OS 1:10,000 as being shown as unenclosed. Small isolated unenclosed woods were not considered as being wood.

Downland

- 2.43 The location of downland (HLT 6.1) was indicated by reference to the KCC calcareous grassland habitat survey and the semi-calcareous grassland habitat survey.

Valley floor and water management

- 2.44 The extent of the valley floor was mapped according to the limits of the flat valley ground either side of streams or rivers where field boundaries are shown as water-filled ditches on the 1:10,000 maps. It was usually the case that features such as field boundaries, roads, and tracks defined the valley-floor area. When this was not the case, and the limits passed through a field, contours were followed.
- 2.45 Within the valley-floor areas defined in this way, a variety of specific valley-floor or water-associated land uses were mapped as individual valley types. This included HLT 7.6

(watercress beds), HLT 7.7 (fishponds, hatchery complexes, natural ponds and lakes) and HLT 7.8 (Water mill complexes). Lakes formed by gravel extraction were mapped separately as features related to extractive industry.

- 2.46 The scale of some of these features (especially watercress beds and mills) was too small for all to be mapped. Small watercress beds, fishponds and mills without a substantial associated mill pond were generally not recorded.
- 2.47 Of the larger scale valley-floor types, valley-floor woodland (HLT 7.2) and marsh and rough grazing (HLT 7.3) were identified by the appropriate map symbols.
- 2.48 The recording of water meadows (HLT 7.4) was restricted to those consisting of the most substantial and patterned system of ditches. Areas with sparsely located ditches could sometimes also be identified as water meadows where the pattern of ditches seemed likely to reflect the presence of former water meadow systems, but it is likely that the results may under-represent the full extent of areas of simpler (and possibly older) water meadow systems.
- 2.49 After identifying the above specific categories, the remaining valley-floor landscape was recorded as miscellaneous valley-bottom paddocks and pastures (HLT 7.1). These enclosures tend to vary considerably in their morphology of field shape and boundaries. Initially it merely seemed impractical to try to distinguish distinct patterns within this variation given the narrow floodplains of the Kent rivers.
- 2.50 However, in practice it increasingly became evident that this variability is an inherent characteristic of valley-floor enclosures. Their form tends to be affected by the existence of a mixture of natural channels, imposed field patterns, and drainage ditches that may result in selective straightening of sinuous boundaries.
- 2.51 Another feature type that was not mapped as an independent HLT was the 'Pond bays' associated with the iron making industry. These are, however, recorded within the SMR and hence it should be possible to cross-reference them with the collated GIS data created during this project.

Coastal

- 2.52 Most coastal landscape types were mapped directly from interpretation of the OS 1:10,000 maps according to the appropriate mapping conventions. Types for which this was possible were mud flats (HLT 8.7), shingle and dunes (HLT 8.6), harbours and marinas (HLT 8.5) and salt marsh (HLT 8.2).
- 2.53 Coastal wetland (HLT 8.1) could be confused with valley-floor marsh and rough grazing (HLT 7.3), or with salt marsh (HLT 8.2), which are also shown with the same marsh symbols. Salt marsh was identified by its highly irregular shape and the presence of many small creeks.

Coastal wetlands were distinguished from valley-floor marsh where the adjacent rivers were tidal, or they were immediately adjacent to the coast though not within the inter-tidal zone.

- 2.54 Reclaimed land (HLT 8. 4) was characterised by its low elevation adjacent to the coast and was identified by comparing the present coastline with that indicated on the OS 1st edition 1” series. Typically these areas have much straighter seaward boundaries than the natural coast and tend to lack field boundaries or are industrialised.

Settlements

- 2.55 A basic distinction was made between the pre- and post-1801 extent of settlement. In effect, this can be seen as a rough approximation to pre- and post-industrialisation. Deserted settlements were not mapped, largely because of their very small extents. However, it would be possible, and perhaps fruitful, to consider their distribution in relation to the Historic Landscape Types (especially in comparison to the pattern of pre-1801 settlements) using digital plotting of locations from the County Sites and Monuments Record.
- 2.56 Settlements were also divided between a number of morphological types.
- 2.57 Scattered settlements with paddocks (HLT 9.1 pre-1801; HLT 9.2 post-1801) represent areas with dense dispersed settlement in and amongst very numerous, very small fields and paddocks. The post-1801 version of this includes areas of ‘stockbroker belt’ detached houses with large gardens.
- 2.58 Common edge settlements were identified where clearly related to extant or former commons (HLT 9.3 pre-1801; 9.4 post-1801).
- 2.59 Originally, hamlets and villages pre-1801 were mapped as distinct HLTs, namely HLT 9.5 and 9.7. However, since at the level of analysis being undertaken there was no obvious and robust basis for distinguishing smaller hamlets from villages it became apparent that they were better grouped under one HLT: accordingly they were combined as HLT 9.7 and HLT 9.5 was not used further. Post-1801 village expansion was mapped as a general late settlement type (HLT 9.6).
- 2.60 Towns (HLT 9.9 pre-1801, 9.6 post-1801) were mapped in the same manner as villages.
- 2.61 Caravan sites (HLT 9.11) were recorded as a settlement type when they were of a substantial permanent nature, and included surfaced roads and static caravans. Camping sites were not included when they were annotated by a tent symbol alone and did not consist of a network of roads.

Parkland and designed landscape

- 2.62 The basis for identifying areas of parkland was the digital data supplied by Kent County Council outlining the extent of known parks and gardens. This was supplemented by

reference to a range of other sources including The Register of Parks and Gardens (English Heritage), OS 1:10,000, OS 1:25,000 and OS 1st edition maps.

- 2.63 Woods and valley-floor areas situated within parkland areas were mapped as parkland rather than as the relevant woodland or valley-floor types.
- 2.64 Many historic deer parks (HLT 10.3) are known from boundary features only and have lost their parkland character, in which case they have been mapped as whatever type reflects their current nature. The original distribution of deer parks may be established by cross-reference to the Sites and Monuments Record.
- 2.65 Pre-1801 parkland (HLT 10.1) has been distinguished from later parkland by its depiction on the OS 1st edition 1" maps.
- 2.66 Post-1801 parkland (HLT 10.2) includes a few areas of estate-type landscape where a particularly strong element of design is evident in copse plantations, shelter belts etc.

Recreation

- 2.67 Recreation features, HLT 11.1-11.3 (Racecourses, golf courses and major sports fields and complexes) were mapped directly from the OS 1:10,000 maps. The mapping of sports fields and complexes (HLT 11.3) was restricted to those of a larger size. Smaller sports fields/areas associated with schools were not recorded.

Extractive and other industry

- 2.68 Extractive and other industrial HLTs were identified and mapped directly from OS 1:10,000 maps. Chalk, stone, clay and gravel quarries (HLT 12.1 and 12.2) were distinguished by their geological location. Active and disused quarries were mapped, including those now flooded and those used as refuse sites. While these are visually very different, they represent landscape features that are distinctive of the after-use of quarries. Current workings were not distinguished separately on the basis that these are transitory phases of quarry landscapes.
- 2.69 Modern large-scale industry (HLT 12.4) was distinguished from smaller industrial complexes and factories by being named on OS 1:10,000 maps as oil refineries, power stations etc., and by their large scale. Industrial complexes and factories situated within urban areas were recorded as general post-1801 development. Dockyards (HLT 12.6) were mapped as large-scale industry, rather than coastal.

Inland communication facilities

- 2.70 It was possible to identify and map the inland communication facilities directly from the OS 1:10,000 maps. Military based airfields were recorded as 20th-century defence sites (see below).

- 2.71 Other airfields (HLT 13.3) were identified from the 1:10,000 maps and were mapped to include associated buildings. Disused airfields were included if they were still evident as former airfields, with relict runways etc influencing the field pattern.
- 2.72 Railway yards (HLT 13.1) and motorway and other major road service areas (HLT 13.4) were identified from the OS 1:10,000 maps.

Military and defence

- 2.73 Military and defence-related areas were mapped based on whether they are sufficiently large and distinctive to make, or to have left a distinct impact on the landscape. This, therefore, includes prominent disused prehistoric hillforts, as much as disused military airfields where they have clearly influenced the landscape, but does not include either if they have been obliterated with no clearly visible relict character.
- 2.74 Very small features, such as pillboxes have not been mapped, even where forming parts of large-scale defence systems.

Project implementation: methodology, structure and IT facilities

Introduction

- 2.75 The project was designed to create a digital dataset for incorporation into a full GIS that would allow a flexible and detailed approach to the analysis. The creation of this report and its associated mapping is the result of the initial analysis and investigation of that dataset within the context of the in-house GIS. The figures illustrate the potential for the production of detailed queries based on this dataset in conjunction with other digital data supplied by the County Council.
- 2.76 Due to the interactive nature of the dataset created here it is necessary to outline the procedures and methodology employed in its creation to allow users the opportunity to understand its strengths and limitations.

Team structure and roles

- 2.77 The study was initiated by English Heritage and Kent County Council and started by George Lambrick (formerly OAU) whose input continued throughout the early stages of the project. GL was also consulted about, and had significant levels of input into, the final report.
- 2.78 The main body of the project was managed and supervised by Julian Munby (OAU).
- 2.79 Paul Miles (OAU) provided computing and IT development, training and support.

- 2.80 The mapping and detailed work on developing examples of the historic landscape types, digitising and compilation of appendices was undertaken by Matt Ridley (OAU), based on his prior experience with the Hampshire Historic Landscape Assessment.
- 2.81 The final report was a collaborative effort undertaken by Andrew Croft (OAU) and Matt Ridley, with significant input from Julian Munby and George Lambrick.

Project structure

- 2.82 The project was organised into a series of stages as outlined below.

Sources and character assessment

- 2.83 The first stage of the study consisted of the identification of sources and the drafting of the list and character of Historic Landscape Types. This was undertaken by George Lambrick and Matt Ridley based on the Historic Landscape Types devised for the Hampshire project. The Historic Landscape Types devised for Hampshire were broadly compatible although alterations were required.

Pilot study

- 2.84 The draft Historic Landscape Types were assessed for usability and validity through a localised pilot-study mapping programme. Six 10-km squares were mapped for the pilot, covering different representative parts of the county. This showed that the typology was useable and led to various refinements in the types defined.

Mapping, topology and checking

- 2.85 The mapping of the Historic Landscape Character types was undertaken by a process of 'head up' digitising directly on to OS 1:10,000 raster digital data as supplied by Kent County Council. The boundaries and extents of data were created through an analysis of the 1:10,000 and 1:25,000 map data. This was supplemented by further digital data on ancient woodland extents, parkland boundaries and other datasets supplied by Kent County Council.
- 2.86 The polygon topology in a vector format was then created, cleaning up overshoots and undershoots at node points. The resultant polygons were then labelled.
- 2.87 To create a visually effective map the polygons were then colour-coded according to their Historic Landscape Types, each type being assigned a separate layer within the digital dataset so that combinations could be switched on or off. The figures included in this report illustrate a small selection of possible combinations.
- 2.88 Other digital map data sets were added to the project GIS to aid analysis. These were supplied by Kent County Council and included draft Landscape Character Areas and modern Civil Parish and District boundaries.

- 2.89 The initial expectation that the Kent County Council Landscape Character Areas (LCAs) would form the basis of this study was modified, with the agreement of the Heritage Conservation team, when the complexity of the Kent County Council results became apparent (some 118+ LCAs). It was then decided that the recognition of independent Historic Landscape Character Areas (HLCAs) would form the main output of this study. These HLCAs, along with the HLTs, could then be used for comparison with other created landscape character areas from outside of this project.
- 2.90 A considerable part of the project involved the repeated checking and cross-checking of the dataset as it was generated. This was carried out on a day-to-day basis and also at co-ordinated stages within the project and during the interpretative phase of the report writing.

Data structure and GIS analysis

- 2.91 There are two groups of data attached to each polygon. The first is descriptive in nature and covers:
- historic landscape grouping
 - historic landscape type within grouping
 - certainty of definition, scale of 1 to 5, with 5 equalling absolute certainty whilst 1 indicates uncertainty and significant potential for alteration
 - comment.
- 2.92 The second group is topological in nature and covers:
- unique ID number
 - area in square metres
 - perimeter in metres.

Chapter 3

Description of The Historic Landscape Character Areas of Kent

Introduction	1
Overall historic landscape attributes of Kent	1
HLCA 1 - Western Weald	2
HLCA 2 - Western Greensand	2
HLCA 3 - Western Gault Band	2
HLCA 4 - Western North Downs	3
HLCA 5 - North-Western Foothills	3
HLCA 6 - Dartford and Gravesham Conurbation	3
HLCA 7 - Central Low Weald	4
HLCA 8 - Wealden Horticultural Pocket	4
HLCA 9 - Low Weald Pocket	4
HLCA 10 - Medway Basin	5
HLCA 11 - Greensand Horticultural Belt	5
HLCA 12 - Rochester / Chatham Hinterland	5
HLCA 13 - Hoo Peninsula	6
HLCA 14 - Southern High Weald	6
HLCA 15 - The Marling Weald	6
HLCA 16 - Central North Downs	7
HLCA 17 - Northern Horticultural Belt	7
HLCA 18 - Isle of Thanet	8

HLCA 19 - Wantsum Channel	8
HLCA 20 - Romney Marsh	8
HLCA 21 - Eastern Coastal Belt	9
HLCA 22 - Former Blean Forest	9
HLCA 23 - Forest of Blean	9
HLCA 24 - North Chalk Downs	10
HLCA 25 - Eastern Clay-with-Flints North Downs	10
HLCA 26 - Isle of Sheppey	10
HLCA 27 - Stour Valley Parkland	11
HLCA 28 - Northern Coast and Marshland	11
HLCA 29 - Clay-with-Flints North Downs	11
HLCA 30 - Weald-Romney Border Area	12
HLCA 31 - Central Valley Area	12
HLCA 32 - Urban Conurbation	12
HLCA 33 - Central High Weald	13
HLCA 34 - Wantsum Coastal Belt	13

Introduction

- 3.1 This chapter describes the nature and characteristics of the thirty two Historic Landscape Character Areas (HLCAs), as created by the OAU team based on the analysis of the mapped HLTs.
- 3.2 The prefix HLCA represents an entirely different grouping from other prefixes such as LCA (Landscape Character Area) and HLT (Historic Landscape Type). The HLCAs have been specifically created as part of this project to enable the first stage of analysis to be undertaken. They represent groupings and patterns of identifiable HLTs and are not based on any other form of data. The work was carried out independently of the landscape character mapping being undertaken by Kent County Council and the Countryside Commission Landscape Character Mapping.
- 3.3 The HLCAs were derived through the considered analysis of the distribution and concentrations of HLTs, as portrayed on Figure 3.1. It was, for considerable areas of the county, a relatively straightforward process. In other areas this process proved problematic due to the complex nature of the historic landscape data gathered.
- 3.4 In light of this, a grading of the reliability of the HLCA definition has been made. This grading reflects the cohesiveness of the HLCA's definition and in no way reflects the value, significance or importance of the actual physical landscape character of the area.
- 3.5 This grading of reliability can be found at the start of each listing and is graded on a scale of 1 to 5, with 5 representing a homogeneous and well-defined area with an obvious character, whilst 1 would indicate a very poorly defined area with little internal homogeneity and definable character.
- 3.6 The particular proportions of differing Historic Landscape Types for each HLCA are displayed in Figures 3.3–3.19. These are all based on the same breakdown of types as presented in the second chart of Figure 3.2. This enables a rapid cross-referencing of the varying types and also a broad comparison with the overall figures for the county.

Overall historic landscape attributes of Kent

- 3.7 The basic breakdown of the Historic Landscape types for Kent (see Figure 3.2) gives a very broad and generalised picture of the county, but it does not in any way reflect the true complexity of the county's historic landscape character. Even the more developed breakdown presented in the second chart (see Figure 3.2) only gives the broadest of indications in regard to the relationships and proportions of identified types.
- 3.8 Overall Kent comprises:
- 52.2% fields

- 15.0% settlement
- 9.1% reclaimed marsh
- 8.9% woodland
- 4.8% horticulture
- 3.9% coastal areas

3.9 The remaining broad groupings of types (commons, rough ground, parks, industry etc) account for approximately 7% in total. It should be recognised that these are unlikely to be fully represented due to the nature of the mapping process which excluded elements like linear communication routes. Also industrial areas may have been subsumed into larger urban areas in many cases.

HLCA 1 - Western Weald

3.10 Reliability Grading 3

3.11 A relatively well-defined area, although its relationship with HLCA 9 (Low Wealden Pocket) and HLCA 7 (Central Low Weald) is somewhat debatable.

3.12 The area straddles the Eden river valley forming a distinctive character area with similarities to other HLCAs along the Weald including HLCA 14 (South High Weald) and HLCA 7 (Central Low Weald). These three areas do have characters distinctive enough to warrant separation indicating that the Weald cannot be considered as a homogeneous area.

3.13 The area is characterised by a balanced mixture of relatively uncommon types, including Assarts, Fields with Ponds (Marling) and Parkland. There is also a significant mix of woodland types.

HLCA 2 - Western Greensand

3.14 Reliability Grading 4

3.15 A well-defined area although its relationship with HLCA 11 (Greensand Horticultural Belt) is somewhat debatable. The area runs roughly east-west and is strongly linear in nature with the HLTs running perpendicular to the orientation of the HLCA.

3.16 The HLCA occupies an undulating strip of land marking the scarp slope, often referred to as the Chart. The dominant HLTs include all woodland and assart types and a relatively high proportion of parkland. This is in keeping with the topographical location of the area.

HLCA 3 - Western Gault Band

3.17 Reliability Grading 4

- 3.18 A well-defined area between the Downs and the lower land to the south. Its boundaries could be subjected to minor revisions in places.
- 3.19 The area is composed primarily of field types associated with flatter and more productive soils. These field types include 'prairie' fields (HLT 1.13), regular fields (HLTs 1.9–1.11) and wavy bounded fields (HLTs 1.6, 1.25), all of which seem to indicate prolonged agricultural activity.
- 3.20 The M25 motorway currently dominates the area and it is likely that this strip has served as an east-west communication route for significant periods of history.

HLCA 4 - Western North Downs

- 3.21 Reliability Grading 3
- 3.22 A varied area with reasonably well-defined edges. Its lack of homogeneity does mean it is difficult to characterise summarily.
- 3.23 The area has a strongly linear nature with its dominant HLTs running roughly north-south in accordance with the basic topography. The area is dominated by regular field types (HLT 1.9–1.11), with significant elements of post-1801 settlement (HLT 9.6), woodland (HLTs 4.1–4.11) and fields bounded by paths and tracks (HLT 1.14). This mixture is possibly due to imperfect boundaries being assigned to the area. Therefore elements of neighbouring HLCAs may have been ascribed to this one.
- 3.24 Overall, it does possess a relatively distinct character when compared with surrounding HLCAs, although internally this character does vary, depending on topography and location.

HLCA 5 - North-Western Foothills

- 3.25 Reliability Grading 4
- 3.26 A relatively distinctive area with moderately well-defined boundaries. The area is primarily defined by HLT 1.14 (Irregular fields bounded by roads, tracks and paths) which in this instance probably represents the development of 20th-century market gardening in the hinterland of Dartford and London.

HLCA 6 - Dartford and Gravesham Conurbation

- 3.27 Reliability Grading 5
- 3.28 A well-defined urban conurbation with some limited marshland and horticulture along its edges.

- 3.29 This area is defined by large-scale urban and industrial growth since 1801. The settlements have expanded on to the coastal band and also inland on to the foothills of the downland areas. It is likely that the area would have had a character closer to HLCA 5 (North-Western Foothills) if the urban development had not taken place. Its separation from the more general HLCA 32 is due to the characteristic nature of the horticultural, marshland and industrial inclusions that are found within the Dartford and Gravesham conurbation.

HLCA 7 - Central Low Weald

- 3.30 Reliability Grading 3
- 3.31 A difficult to define HLCA, characterised more by its difference from the surrounding areas than its inherent characteristics. It does, however, possess a significant quantity of horticulture which can be considered as one of its defining characteristics.
- 3.32 There is a mixture of HLTs across the area with a potentially different sub-group of character types found at the eastern end of the HLCA. This area could be considered as a separate HLCA but it was felt that the difference between these areas was not sufficient to warrant the separation.
- 3.33 The area covers a boundary zone between the horticultural belts to the west and the Marling Weald to the east. This boundary zone probably represents a truer picture of the historic nature of the Low Wealden landscape with its mixture of fields, horticulture, woodland and settlement rather than the more singular HLT dominated areas around it.

HLCA 8 - Wealden Horticultural Pocket

- 3.34 Reliability Grading 3
- 3.35 A distinctive area but somewhat difficult to define, its borders along the eastern edges being particularly open to redefinition.
- 3.36 The area is dominated by horticultural HLTs with other significant components including marling fields (HLT 1.16–1.17), regular and wavy bounded fields (HLT 1.9–1.11 and HLT 1.6, 1.15) and a relatively significant grouping of irregular straight bounded fields (HLT 1.7).
- 3.37 This HLCA is different other horticultural HLT dominated HLCA including HLCA 17 (Northern Horticultural Belt) and HLCA 11 (Greensand Horticultural Belt) due to its location and the presence of dominant High Weald forms such as Marling fields, woodland and assarts.

HLCA 9 - Low Weald Pocket

- 3.38 Reliability Grading 3

- 3.39 A relatively poorly defined but fairly distinctive area, separated due to an increased proportion of regular and wavy bounded fields (HLTs 1.9–1.11 and HLTs 1.6, 1.15) in comparison to HLCA 1 (Western Weald).
- 3.40 This area occupies the northern hinterland of Tonbridge and in part reflects that role with its strong mix of types including a domination of regular and wavy bounded fields. There is also a significant grouping of post-1801 settlement. Its character is probably due primarily to the influence of the urban centre at Tonbridge and reflects the demands of that town on the surrounding countryside.

HLCA 10 - Medway Basin

- 3.41 Reliability Grading 4
- 3.42 An area defined as valley floor (see Chapter 2), with occasional patches of horticulture and fields.
- 3.43 This river valley complex contains a range of HLTs aside from valley-floor types, including horticulture (HLT 3.1–3.6), industry and urban development (HLTs 12.1–7 and HLT 9.6). It is surrounded by horticultural and probably forms part of the hinterland for the towns of Maidstone, Tonbridge and Royal Tunbridge Wells.

HLCA 11 - Greensand Horticultural Belt

- 3.44 Reliability Grading 3
- 3.45 A moderately well-defined area primarily defined by densities of horticultural HLTs. It is not completely homogeneous and its eastern and south-western boundaries could be reconsidered.
- 3.46 The area is predominately noted for its scattered horticultural HLTs (3.1–3.6), although the density of these HLTs does decrease markedly in the eastern third of the HLCA. The HLCA occupies the hinterland area of Maidstone and the patterning of HLTs seems to reflect that hinterland status. Other HLTs with a strong presence include regular and wavy bounded fields (HLTs 1.9–1.11 and HLTs 1.6, 1.15), post-1801 settlement (HLT 9.6) and, interestingly, coppice woodland (HLT 4.9).

HLCA 12 - Rochester / Chatham Hinterland

- 3.47 Reliability Grading 4
- 3.48 A relatively well-defined and obvious area composed of ‘prairie’ fields (HLT 1.13) and coppice woodland (HLT 4.8–4.9), differing from HLCA 17 (Northern Horticultural Belt) through its lack of HLT type 1.14 (Irregular fields bounded by roads, tracks and paths).

- 3.49 The ‘prairie’ fields indicate that the area has been heavily worked in the last two hundred years, leading to the gradual increase in field size and the stripping out of defunct boundaries. The coppice woodland has tended to survive in areas of steep topography or poor soils. Other issues influencing survival are the presence of estates and their more traditional land management practices.

HLCA 13 - Hoo Peninsula

- 3.50 Reliability Grading 4
- 3.51 An obvious and well-defined area of distinctive historic landscape. The area is bounded by on three sides by natural HLTs, namely coastal types.
- 3.52 The peninsula is characterised by irregular fields bounded by tracks, roads and paths (HLT 1.14), with a scattering of other types including orchards (HLT 3.1), urban settlement (HLT 9.6), coppice woodland (HLTs 4.8–4.9) and recreational areas (HLTs 10.1–10.3, 11.1–11.3). The area has an extremely well-defined set of boundaries, for the most part surrounded by coastal types and reclaimed marshland. There is a strong character boundary between the peninsula and the neighbouring land, HLCA 12 (Rochester / Chatham Hinterland).
- 3.53 The mapping of significant portions of this HLCA as HLT 1.14 (Irregular fields bounded by roads, tracks and paths) could, in this instance, be debated for reasons outlined in Chapter 6 of this report.

HLCA 14 - Southern High Weald

- 3.54 Reliability Grading 4
- 3.55 A relatively well-defined area composed of a combination of types but dominated by fields with ponds (HLT 1.16 and 1.17). Its boundary with HLCA 15 (The Marling Weald) could be altered and it may be considered necessary to create a different HLCA for the island of HLCA 14 that lies within the boundaries of, but is distinctive from, HLCA 20 (Romney Marsh).
- 3.56 The primary difference between HLCA 15 (The Marling Weald) and this area is topographically generated, with HLCA 15 being less undulating and with less steep scarp slopes. This leads to an increase in woodland within HLCA 14 giving rise to a subtly different character.

HLCA 15 - The Marling Weald

- 3.57 Reliability Grading 5

- 3.58 A very well-defined area, on the Weald Clays, composed predominately of fields with ponds (HLT 1.16–1.17). The area's boundaries could be changed to a minor degree in relation to HLCA 14 (Southern High Weald), but the present line is relatively coherent.
- 3.59 The marling pits are a highly distinctive feature of the Wealden clays in this area of Kent and once probably occupied a broader band to the west. This can be seen in HLCA 1 (Western Weald) and the northern tip of HLCA 7 (Central Low Weald) where occasional outcrops of marling pit fields can be noted.

HLCA 16 - Central North Downs

- 3.60 Reliability Grading 3
- 3.61 A relatively coherent area with a mixed character of fields and other HLTs. The alignment of the fields in a north-east to south-western direction is one of the primary characteristics of the area.
- 3.62 It is likely that elements of the area have been subsumed within the growth of HLCA 17 (Northern Horticultural Belt) as the hinterlands of the northern Kentish towns grew.
- 3.63 The area has a very similar character to the central belt of HLTs identified in HLCA 29 (Clay-with-Flints North Downs) and overall has a similar distribution of HLTs to that HLCA. This is primarily due to a shared topography, namely steep scarp slopes.

HLCA 17 - Northern Horticultural Belt

- 3.64 Reliability Grading 4
- 3.65 A relatively well-defined linear area running from Medway through to the Wantsum Channel. The belt is primarily defined by horticultural activity (HLT 3.1 to 3.6), with a predominance of orchards (HLT 3.1).
- 3.66 This belt occurs on the sandier soils of the northern areas in the sheltered belt below the downland areas. Economically, it is situated between a series of major towns which would have supplied substantial markets as well as an extensive road and rail corridor for transportation further afield. The majority of the land associated with the horticulture is relatively flat and associated HLTs include 1.13 (prairie fields) and 1.16 (irregular fields bounded by tracks, roads and paths). These HLTs are indicators, in this case, of the relatively recent rationalisation of the enclosed landscape through the process of field boundary removal.
- 3.67 There is a case for dividing this area into two sections based on the varying quantities of 'prairie' fields (HLT 1.13) either side of Faversham.

HLCA 18 - Isle of Thanet

- 3.68 Reliability Grading 5
- 3.69 A very well-defined area both in terms of its HLTs and topographic location.
- 3.70 The Isle of Thanet is characterised primarily by two HLTs, namely post-1801 settlement (HLT 9.6) and irregular fields bounded by roads, tracks and paths (HLT 1.14). The former is a relatively recent phenomenon and overlies potentially earlier landscapes of a similar character to HLT 1.14. The presence of HLT 1.14 in this instance may indicate a process of informal enclosure in the post-medieval period.
- 3.71 The nature of the urban development and the intermixing of the two primary types (HLT 1.14 and HLT 9.6) led to Margate and Ramsgate not being classed as separate urban entities (i.e. HLCA 32), but rather as integral elements of the historic landscape character of the Isle of Thanet.
- 3.72 Other notable HLTs include small patches of orchards (HLT 3.1), pre-1801 settlement (HLT 9.1, 9.7, 9.9) and pockets of industrial activity (HLT 12.1–12.7).

HLCA 19 - Wantsum Channel

- 3.73 Reliability Grading 5
- 3.74 A very well-defined area composed almost entirely of marshland reclaimed from the sea (HLT 5.1–5.4), lying between the HLCA 18 (Isle of Thanet) and HLCA 25 (Eastern Clay-with-Flints North Downs) and the Stour Valley.
- 3.75 The area has a history of reclamation and usage stretching back to at least the 12th and 13th centuries in connection with the considerable ecclesiastical estates in the region.
- 3.76 The inclusion of the Stour river valley running up to Canterbury at the south-western extent of this area is debatable and could be changed, but it does share the same basic characteristics.

HLCA 20 - Romney Marsh

- 3.77 Reliability Grading 5
- 3.78 A very well-defined area composed almost entirely of reclaimed marshland.
- 3.79 This area has been studied in considerable detail on a variety of levels and by a variety of organisations for a variety of purposes ranging from soil morphology through to historical documentary studies charting its development. Suffice to say any comment here is unlikely to add much to this already well-understood area.

- 3.80 The site has a history of reclamation and usage stretching back to at least the 12th and 13th centuries although it has proved impossible within the scope of this study to map the topological differences between early reclamation and more recent activity.

HLCA 21 - Eastern Coastal Belt

- 3.81 Reliability Grading 4
- 3.82 A relatively well-defined area composed of a combination of urban developments, industrial activity and coastal land types. Its boundary with the neighbouring HLCA 32, Folkestone, could be altered, although the present line is relatively coherent.

HLCA 22 - Former Blean Forest

- 3.83 Reliability Grading 3
- 3.84 This area is defined as much by its difference to surrounding regions as by its internal homogeneity. There may be a case for dividing it into two separate sections, one to the north of HLCA 23 (Forest of Blean) and one to the south.
- 3.85 The primary HLTs in the area relate to agricultural activity dating from the last 200 years. This incursion into the Forest's edges is due in part to the historic growth of Canterbury and the decline in the economic value of woodland since the medieval period.

HLCA 23 - Forest of Blean

- 3.86 Reliability Grading 5
- 3.87 A very well-defined and historically attested area composed mainly of coppice woodland (HLT 4.8–4.9).
- 3.88 Although the majority of the area is currently under woodland there are numerous encroachments into the core of the woods including significant areas of 'prairie' fields (HLT 1.13), regular enclosure (HLT 1.9–1.11) and orchards (HLT 3.1). These encroachments are generally post-medieval in nature, and some potentially relate to activity within living memory. The northern suburbs of Canterbury are also now encroaching into this core of remaining woodland.
- 3.89 This area defines the surviving heartland of the Forest of Blean, a woodland that dates from at least the 12th century AD. The area was previously associated with the ecclesiastical communities based in Canterbury. At present it is perhaps the most significant single block of surviving woodland in the county.

HLCA 24 - North Chalk Downs

- 3.90 Reliability Grading 4
- 3.91 A relatively well-defined area with a distinctively different character to its neighbours. This is primarily due to the geological chalk base and intensive agricultural activity of the 19th and 20th centuries as represented by the ‘prairie’ fields (HLT 1.13). The area has a strong linearity with an alignment running NE-SW.
- 3.92 Settlement has expanded marginally over the last two centuries but not as extensively as many other areas of Kent.
- 3.93 A feature of this HLCA is the three discrete groups of deserted coal mines.

HLCA 25 - Eastern Clay-with-Flints North Downs

- 3.94 Reliability Grading 4
- 3.95 A relatively well-defined area with a distinctive series of HLT combinations, although it has debatable boundaries in places.
- 3.96 The area is dominated by regular fields (HLTs 1.9–1.11), wavy bounded fields (HLTs 1.6, 1.15) and irregular straight fields (HLT 1.7). These are complemented by a high proportion of common, rough ground and downland (HLTs 2.1–2.5, 6.1) which gives the area its distinctive character. Other notable characteristics are ‘prairie’ fields (HLT 1.13) and post-1801 settlement (HLT 9.6).
- 3.97 The strong linearity of the area, particularly west of Dover is also another defining characteristic of the area. This linearity fades further towards the west as the topography changes orientation and form.

HLCA 26 - Isle of Sheppey

- 3.98 Reliability Grading 5
- 3.99 A well-defined area in terms of its homogenous historic landscape character and also its topographic location.
- 3.100 The island’s character is broken down into three areas. At the eastern end there is an area of reclaimed marsh (HLTs 8.1–8.4) leading to fields on the Isle of Harty, the middle of the island is characterised by regular 19th century field systems (HLTs 1.9, 1.11), whilst at Sheerness and Minster the western end of the area is dominated by urban and industrial development (HLTs 9.6, 12.1–12.7). There are also small patches of orchards (HLT 3.1) and caravan parks (HLT 9.11) plus a prison (HLT 9.12) on the island.

HLCA 27 - Stour Valley Parkland

- 3.101 Reliability Grading 4
- 3.102 A distinctive grouping of HLTs along the western edge of the Stour Valley overlooking Wye. The area's western boundary may be open to debate.
- 3.103 The development of this distinctive area of landscape is due to the combination of poor slope aspect and historical ownership patterns. The survival of extensive areas of woodland, coppice and parkland is primarily due to the later. Notable expanses of woodland include King's Wood and Longbeech Wood, which are accompanied by Godmersham Park and Chilham Park.

HLCA 28 - Northern Coast and Marshland

- 3.104 Reliability Grading 5
- 3.105 An extremely well-defined area both in terms of the HLTs and the topographic location. A case could be made for further subdivision based on geographic separation.
- 3.106 This area comprises a relatively balanced mix of reclaimed marsh and coastal landscape types typifying the relationship between humans and the marine environment. Areas situated closer to the mouth of the Thames, i.e. the area around the Hoo peninsula, contain a greater degree of industrial activity.
- 3.107 It is likely that this belt continued further east towards HLCA 19 (Wantsum Channel) but the expansion of Whitstable and Herne Bay town (part of HLCA 22, Former Blean Forest) has overlain any evidence of this.

HLCA 29 - Clay-with-Flints North Downs

- 3.108 Reliability Grading 3
- 3.109 A reasonably distinguishable area, partially defined by its difference to other neighbouring areas rather than its own internal characteristics. The boundary with HLCA 31 (Central Valley Area) is defined purely in terms of the orientation of features in the landscape.
- 3.110 The area is divided into three strips running roughly east-west. These strips vary slightly in character and probably reflect the influence of Canterbury (in the case of the northern strip) and Ashford in the case of the southern area. The middle strip has a slightly increased dominance of woodland indicative of undulating topography and limited settlement. This low level of settlement growth post-1801 is also characteristic of the area as a whole.

HLCA 30 - Weald-Romney Border Area

- 3.111 Reliability Grading 4
- 3.112 A small reasonably obvious area with a high proportion of surviving woodland, which is the defining characteristic of the area.
- 3.113 This irregular and narrow character area occupies the land bordering HLCA 20 (Romney Marsh), HLCA 31 (Central Valley Area) and HLCA 15 (Marling Weald). Its defining characteristic is well-established woodland (HLTs 4.1–4.11) with a scattering of coppice (HLTs 4.8–4.9) and regular fields (HLTs 1.9–1.11).
- 3.114 The landscape undulates considerably with numerous relatively steep valleys and hillsides defining the boundary between the marsh and interior. It is on these steeper slopes that the remaining, and characteristic, woodland is located.

HLCA 31 - Central Valley Area

- 3.115 Reliability Grading 2
- 3.116 A broad moderately well-defined area, but it is difficult to determine the characteristics of this relatively varied zone and its extents are very much founded on perceived differences with surrounding HLCAs. There is potential for further subdivisions within this zone, particularly at its western end.
- 3.117 The area is dominated by regular and wavy bounded fields (HLTs 1.9–1.11, 1.6, 1.15) with a considerable subsidiary element of ‘prairie’ fields (HLT 1.13), all of which indicate extensive agricultural activity over the last 200+ years.

HLCA 32 - Urban Conurbation

- 3.118 Reliability Grading 5
- 3.119 Obvious and well-defined discrete blocks of urban conurbation including areas of industry, recreation and other HLTs. These have all arisen since 1801 and reflect the large-scale population shift and growth in the region. There is a marked concentration of these areas along major transportation corridors and also in the north-western part of the county where the influence of London is far greater.
- 3.120 These have been defined as separate entities due to the sharp contrast between discrete blocks of urban conurbation and surrounding HLCAs. In some instances, e.g. HLCA 18 (Isle of Thanet) and HLCA 26 (Isle of Sheppey) the distinction was deemed to be not so discrete and observable and hence the urban development has been included as an integral part of the HLCA’s character.

HLCA 33 - Central High Weald

- 3.121 Reliability Grading 3
- 3.122 This area is composed of an extremely varied mix of HLTs including all major types. This reflects the nature of the historic landscape in the High Weald and the changing patterns of landuse that have occurred in the area over the previous few centuries.
- 3.123 Dominant HLTs include woodland types (HLT 4.1–4.11), coppice, horticulture (HLT 3.1–3.6) and smaller fields types (HLT 1.9, 1.15). Settlement is scattered and thin across the area with little in the way of extensive post-1801 development.

HLCA 34 - Wantsum Coastal Belt

- 3.124 Reliability Grading 5
- 3.125 A small distinct area of coastal land types (HLT 8.1–8.10) with significant expanses of recreational land use (HLT 11.1–11.3). The area straddles the coastal fringe of HLCA 19 (Wantsum Channel) and is distinguished in part by sand dunes (HLT 8.9) located in the area.
- 3.126 Although small in size it was felt necessary to distinguish this character area from surrounding areas due to its characteristic qualities.

Chapter 4

Commentary on the Historic Landscape Types of Kent

Introduction	1
Assarts (Figure 4.1)	1
Irregular fields bounded by roads, tracks and paths (Figure 4.2)	1
Wavy bounded fields with ponds (Figure 4.3)	2
Regular fields, 19th and 20th centuries (Figure 4.4)	2
Wavy bounded fields and irregular straight bounded fields (Figure 4.5)	2
Woodland (Figure 4.6)	3
Downland (Figure 4.7)	3
Commons and rough Ground (Figure 4.7)	4
Horticulture (Figure 4.8)	4
Coastal and estuary (Figure 4.9)	4
Reclaimed marsh (Figure 4.10)	5
Parkland and recreation (Figure 4.11)	5
Settlement (Figure 4.11)	5
Industry (Figure 4.12)	6
Military and Defence (Figure 4.12)	6

Introduction

- 4.1 This chapter provides a commentary and brief description of the distribution and relationships of Historic Landscape Types as identified during the study. This is primarily done with regard to other types and general topographic patterns (see Figures 4.1 to 4.12) but reference is also made to Historic Landscape Character Areas (Figures 3.1 to 3.19).
- 4.2 The primary purpose of this chapter is to identify patterns and concentrations of HLTs that may indicate particular adaptations to and patterns of exploitation of the physical environment. It is also likely that significant elements of the patterning would have been created by social and economic factors.
- 4.3 This element of the report does not discuss each HLT in detail but rather discusses various arbitrary groupings as outlined in Figures 4.1 to 4.12

Assarts (Figure 4.1)

- 4.4 The distribution of assarts, the fields that reflect the colonisation of former woodland, can be seen on Figure 4.1. These cover 1.57% of the county's area. They are confined to HLCA 1 (Western Weald), HLCA 2 (Western Greensand), HLCA 7 (Central Low Weald) and HLCA 9 (Low Wealden Pocket) for the most part, with small scatters in other areas of the county. The presence of assarts indicated that these areas were formerly wooded to a greater degree than present. There is also a close correlation between surviving woodland and the assarts.
- 4.5 The assarts are found on a range of geological areas including the Wadhurst Clays, Tunbridge Wells Sands, the Weald Clay and the Lower Greensand.

Irregular fields bounded by roads, tracks and paths (Figure 4.2)

- 4.6 This distinctive patterning occurs in a series of relatively well-defined groups across the northern part of the county (see Figure 4.2) and covers 5.96% of the county. It has been used to define HLCA 5 (North-Western Foothills), HLCA 13 (Hoo Peninsula) and HLCA 18 (Isle of Thanet), and it also defines, in part, the southern boundary of HLCA 4 (Western North Downs). This type does not occur on the Weald areas and is not particularly confined to any particular geological area.
- 4.7 The historic rationale behind this particular type is not uniform across the county. It is likely that the areas in the Isle of Thanet region and to the east of Maidstone are probably the oldest elements and represent long-term informal enclosure of potential transhumance landscapes. The area in HLCA 5 (North-Western Foothills) in the north-west of the county is probably more modern in origin and represents a relatively recent opening up of the landscape for the purposes of intensive market gardening. The classification of the Hoo Peninsula (HLCA 13) is debatable.

Wavy bounded fields with ponds (Figure 4.3)

- 4.8 This highly distinctive grouping is found in the southern half of the county (see Figure 4.3) and covers 4.92% of the county. This type is found on the clay soils of the area, including the Weald Clay, the Wadhurst Clay and in more isolated patches to the west on the Wadhurst and the Weald Clays in HLCA 1 (Western Weald) and HLCA 7 (Central Low Weald). This highly characteristic type was used to define HLCA 14 (Southern High Weald) and HLCA 15 (The Marling Weald).
- 4.9 It is likely that this type is associated with the practice of modifying the character of the soil by marling as outlined by Short (1984) and in other publications on agrarian practice in the post-medieval period.

Regular fields, 19th and 20th centuries (Figure 4.4)

- 4.10 These strongly defined regular fields, see Figure 4.4, are a characteristic of North Kent and especially the north-eastern areas. They represent the outcome of systematic enclosure or reorganisation by the agricultural communities of the 19th and 20th centuries. They cover 20.7% of the county.
- 4.11 The ‘prairie’ fields represent the continuing process of field boundary removal. This phenomenon is spread across the county, but is particularly associated with 20th-century enclosure activity and also HLT 1.6 (medium to large fields with wavy boundaries), which represents the enclosure of the Downs from an earlier date, see below.

Wavy bounded fields and irregular straight bounded fields (Figure 4.5)

- 4.12 These are thought to represent the enclosure or engrossment of land during the 17th and 18th centuries prior to the regular enclosure of the 19th century. They cover 15.27% of the county.
- 4.13 These HLTs are divided in their distribution (see Figure 4.5) with the small wavy fields being predominately found in the south of the county in the Weald areas, whilst the larger wavy fields tend to occupy the northern parts of the county and are often found associated with ‘prairie’ fields (HLT 1.13).
- 4.14 The irregular straight fields are spread relatively thinly across the county with a particular concentration in HLCA 25 (Eastern Clay-with-Flints), which helped define that area. Overall the larger fields, both HLT 1.6 (Medium to large fields with wavy boundaries) and HLT 1.7 (Irregular straight bounded fields) seem to occur more regularly on areas with a longer history of development and permanent occupation, whilst the smaller fields are more generally located on areas considered to have only been permanently occupied in more recent times, i.e. the Weald areas. The mixture at the western end of the county represents the complex situation that seems to exist in that area.

Woodland (Figure 4.6)

- 4.15 The surviving woodland can be broken down into three major groupings, pre-1801 woodlands, coppice and woods on scarps and gills. The evidence for post-1801 plantations is sparse.
- 4.16 Perhaps the most significant surviving concentration of woodland in the county is the Forest of Blean (HLCA 23) just north of Canterbury. This is particularly appreciable when one examines the coppice woodland distribution.
- 4.17 Pre-1801 woodlands are thinly scattered across most of the county and cover approximately 3.04% of the land surface. There are significant pockets in the southern part of the county at Bedgebury Forest and Hemsted Forest on the Weald. Other major concentrations lie at Mereworth Woods by Maidstone, and at Kings Wood and Denge Wood near Wye.
- 4.18 The distribution of coppice woodland is broadly similar to that of pre-1801 woodlands, although with a slightly higher concentration in the hinterlands of the towns and the fruit belt. Overall coppice woodland accounts for 3.74% of the land surface.
- 4.19 Woodlands on scarps and gills are interesting not for their extent but their relatively diagnostic character. These woodlands occupy the steep scarp slopes of the downlands and the Weald and form an obvious characteristic used to mark the extent of at least four HLCAs (HLCA 4, Western North Downs; HLCA 16, Central North Downs; HLCA 25, Eastern Clay-with-Flints and HLCA 29, Clay-with-Flints North Downs). Their distribution is very specific and their survival and extent is probably due to the fact that the land they occupy is not of sufficient quality to justify removal and conversion to potentially poor quality agricultural land. They cover 1.4% of the county.
- 4.20 In total, definable extents of woodland occupy 8.76% of the county and form an often recognisable and diagnostic element of the HLCAs identified during this study. The loss of woodland from c.1801 to the present day has been significant, as an examination of the early maps used by this study shows.

Downland (Figure 4.7)

- 4.21 Downland occupies a mere 0.59% of the county's land surface. The major concentration lies at the extreme eastern end of the North Downs in the vicinity of Dover. The area to the south-west of Dover, HLCA 25 (Eastern Clay-with-Flints), was in part defined on the basis of the particularly characteristic strips of downland noted within it. Other areas of the county have small surviving strips and pockets of downland which have proved useful in the cases of HLCA 3 (Western Gault Band) and HLCA 4 (Western North Downs) in defining their boundaries which seem to correspond approximately with the junction of the Chalk and the Gault.

Commons and rough Ground (Figure 4.7)

- 4.22 These categories account for only 0.48% of Kent. The lack of common land is especially marked and is probably due to the intensive nature of the occupation of the county, especially in the last two hundred years in areas such as HLCA 31 (Central Valley area), where significant areas of heathland seemed to have existed in the early 19th century, as observed on the early maps utilised by this study. At present a notable concentration of common land can be found in HLCA 2 (Western Greensand) and HLCA 9 (Low Weald Pocket) with a further grouping in the area around Tunbridge Wells.
- 4.23 Rough Ground is equally sparse although in some instances, such as the strip west of Dover (HLCA 25 - Eastern Clay-with-Flints) it can form an identifiable aspect of the historic landscape character. Here areas of landslides, with subsequent growth of scrub, form an easily recognisable and defining aspect of the landscape's character.

Horticulture (Figure 4.8)

- 4.24 Horticultural activity occupies 4.83% of the Kent landscape with orchards (HLT 3.1) accounting for 97.4% of that. Figure 4.8 clearly shows the strong influence that this has on the historic landscape character of the county. It must be borne in mind, however, that orchards are being continually grubbed out and replanted and hence the mapping will at any one time only provide a snapshot of their extent and nature.
- 4.25 The orchards can be found in two distinct areas, with some outliers, namely HLCA 17 (Northern Horticultural Belt), and the area south of Maidstone around the Medway basin, (HLCA 8, Wealden Horticultural Pocket; HLCA 11, Greensand Horticultural Belt).
- 4.26 The Northern Horticultural Belt (HLCA 17) runs from just north-west of Rochester down through Milton Regis, Faversham and on past Canterbury down the Stour valley towards Richborough where it fades out. The orchards that lie within this belt occupy the Thanet Sands, Chalk deposits, Upper Greensands and River Gravels that run along this band and lie in the shelter of the North Downs. These two physical factors seem to be the significant reasons for the location of the orchards although their close association with substantial urban markets, including London, is probably another factor.
- 4.27 The other areas' (HLCA 8 and 11) orchards also seem to sit on lighter sandier soils, with HLCA 11 occupying the Lower Greensand and the majority of HLCA 8 on the Tunbridge Well Sands. They also lie within the hinterland of a major urban conurbation and near primary transport routes.

Coastal and estuary (Figure 4.9)

- 4.28 The coastal areas with definable characteristics are shown on Figure 4.9. These cover 3.94% of the county. The areas are a mix of worked and unworked land often with a rich ecological significance. Major parts of the coastal zones have been subject to extensive urban (e.g.

HLCA 6, Dartford and Gravesham Conurbation), industrial and recent developments. The coastal lands have been used to define HLCA 21 (Eastern Coastal Belt) and HLCA 28 (Northern Coast and Marshland).

Reclaimed marsh (Figure 4.10)

- 4.29 This category forms a considerable and identifiable element of the Kent landscape (see Figure 4.10) covering 9.07% of the county. Its distinctive nature and well defined edges have enabled the creation of three HLCA's (HLCA 19, Wantsum Channel; HLCA 20, Romney Marsh and HLCA 28, Northern Coast and Marshland). The reclaimed marshland dates from at least the medieval period in some areas.
- 4.30 Differentiating between this early reclamation and later episodes cannot be reliably carried out using the characterisation methods employed during this study. Detailed local work combining documentary analysis and fieldwork at places such as Romney Marsh has succeeded in differentiating between periods of reclamation and this localised approach is probably the way forward for more detailed study of this particular landscape type.

Parkland and recreation (Figure 4.11)

- 4.31 Parkland, including deerparks, occupies 2.00% of Kent. It is spread across the county although The Weald area only has post-1801 parklands, probably as a consequence of its later colonisation by permanent settlements. In one instance, HLCA 27 (Stour Valley Parkland), the presence of parkland and associated coppice woodlands was significant enough to define the character area.
- 4.32 A notable example of a deerpark is the Grade 1 deerpark at Knowle just east of Sevenoaks, which was established in the 15th century and has been extensively worked and remodelled ever since. Similarly Cobham Park, west of Rochester, lies at the centre of an estate landscape which reaches beyond the park itself.
- 4.33 Recreational lands occupy 0.74% of the county and are widely spread with particular concentrations along the eastern shores and in the north-western sector of the county. The majority of these are relatively recent in date.

Settlement (Figure 4.11)

- 4.34 Human settlement accounts for 14.96% of the Kent and subsequently forms a major component of the landscape character of the county. There has been significant expansion since 1801 leading to the dramatic change of many character areas, i.e. HLCA 6 (Dartford and Gravesham Conurbation), HLCA 12 (Rochester/Chatham Hinterland), HLCA 17 (Northern Horticultural Belt) and HLCA 18 (Isle of Thanet). The majority of urban expansion has taken place around earlier established towns, although there are examples where this is

not the case, e.g. Sittingbourne. The location of a site on major transport routes has also been a factor in growth, e.g. Ashford.

- 4.35 Outside the major urban areas there has also been a significant increase in dispersed settlement on a virtually countywide basis, although less dramatically in HLCA 25 (Eastern Clay-with-Flints).

Industry (Figure 4.12)

- 4.36 Although primarily rural in nature, Kent has a considerable quantity of industrial areas, abandoned or otherwise, which account for 1.78% of the county's land surface. Of particular interest are the abandoned coal mines in HLCA 25 (Eastern Clay-with-Flints) and the industrial activity along the north-western coast line. For the most part industrial activity tends to be confined to the areas adjacent to major urban centres, i.e. east of Maidstone, although significant groupings can also be found in the coastal areas (HLCAs 21 and 28).

Military and Defence (Figure 4.12)

- 4.37 HLTs connected with Military and Defence developments (HLT 14.1 to 14.5) are primarily located near the coastline or major estuarine rivers in Kent. These include significant concentrations near important ports such as Dover and Folkestone and the important naval dockyards at Chatham. Overall Military and Defence types do not constitute a significant element of the Kentish landscape, less than 1%, although when they do occur they are significant in terms of the local landscape character.

Chapter 5

Commentary on Settlement Pattern and Landscape Character

Introduction	1
How specific Historic Landscape Types relate to parishes	1
How parishes relate to the general distribution pattern of Historic Landscape Types	2
How parishes relate to the Historic Landscape Character Areas	3
Parish boundaries and settlement patterning	3
Conclusions	4

Introduction

- 5.1 The following is a short examination of some of the observable relationships between established settlement patterns and historic landscape character types identified during the study. This is based primarily on the analysis of the relationships between the data gathered during the characterisation process and the modern parish boundaries.
- 5.2 Parishes and settlements provide a useful avenue of investigation in relation to historic landscape assessment, primarily because:
- they are ancient in origin
 - they are directly related to the cultural-economic communities which have been responsible over time for the shaping of historic landscape character
 - they represent the easiest definable community groups in terms of understanding the interactions of people between the physical, cultural and economic environments represented by natural landforms and culturally developed historic landscape types.
- 5.3 Unfortunately, this particular study is slightly limited by only having access to modern parish boundaries and no postcode settlement data. The latter hampers the analysis as it was impossible to plot every single dwelling in the county as part the project, and thus the finer detail of settlement distribution has been lost in the historic landscape characterisation.
- 5.4 Nonetheless, since changes in rural parish boundaries have not obscured their ancient form it has been possible to discuss a series of issues to greater and lesser degrees, and this discussion constitutes the remainder of the chapter.

How specific Historic Landscape Types relate to parishes

- 5.5 Figure 5.1 demonstrates the complexity of the relationships between parishes and the mapped HLTs. This complexity, with over 9000 separate HLT areas and 87 different types, makes the development of absolute and coherent comment quite difficult at the small scale.
- 5.6 The relationships between particular HLTs and the parishes of Kent are not necessarily as clear cut as previous studies. It was possible in Hampshire to demonstrate that woodland was primarily located on the edges of parishes; in Kent any such patterns tend to vary on a local basis and are difficult to trace across the county as a whole. A few relationships were observed.
- 5.7 One of the more obvious interactions between the parish and a particular HLT is the way in which parkland (HLT 10.1 and 10.2) tends to be found alongside or astride parish boundaries. This is noticeable throughout the county but was particularly obvious in the Stour Valley and at the western end of the county.
- 5.8 A brief examination of the HLT mapping in HLCA 19 (Wantsum Channel) reveals a boundary between two reclaimed marshland HLT types (HLT 5.3 - Small Regular

Enclosures and HLT 5.4 - Regular Enclosures) which corresponds with a parish boundary. This particular pattern does not seem to occur in other parts of the county seemingly indicating that it was a localised event. The relationship is therefore probably due to differing local traditions of reclamation and marshland management.

- 5.9 Overall the broad nature of the study with its focus on developing general county-wide data does limit this particular avenue of enquiry, but with in-depth analysis of local situations it may be possible to address these relationships in a more detailed manner. The scale of the data collected will hopefully allow for this approach to be undertaken, although it does lie outside of the scope of this report.

How parishes relate to the general distribution pattern of Historic Landscape Types

- 5.10 This broader level of analysis is more suited to the dataset gathered during the study. A cursory examination of Figure 5.1 quite clearly demonstrates a diverse range of possible avenues of enquiry.
- 5.11 One area of obvious interest lies in the far west of the county in the region of HLCA 1 (Western Weald), HLCA 2 (Western Greensand) and HLCA 3 (Western Gault Band). Here strongly linear parishes can be seen running across numerous HLT types and effectively incorporating them within their bounds. This would have allowed the communities occupying these parishes to access a range of resource groupings including woodland, pasture, valley floor etc.
- 5.12 This pattern is also clearly visible along the northern fringe of Romney Marsh, where the parish boundaries quite clearly stretch out on to the marshland, giving the occupants access to that valuable resource.
- 5.13 Small patches of a similar pattern can also be detected in the central region of Kent, although modern parish boundary reorganisation does seem to have rather denuded it. This linearity in the central regions is also probably due to another cultural influence, namely transhumance. It is well established that the communities based in the central and northern regions of Kent utilised the Weald for pasture and summer grazing throughout history and the permanent settlements of the Weald are founded upon these temporary settlements.
- 5.14 Overall Kent's parishes do not tend to frame groupings of HLTs but rather they seem to encompass a range of types, even in areas with only a limited range of HLTs. This includes the less linear parishes of the Weald and Eastern Downs, where around the central settlement a series of dispersed settlements can be observed giving access to as diverse range of resources as possible. This pattern is weakest in the northern areas of Kent especially in the urban hinterlands and horticultural belts where rationalisation of agricultural activity in the 19th and 20th centuries has reduced the complexity of the historical landscape.

How parishes relate to the Historic Landscape Character Areas

- 5.15 Figure 5.2 shows the boundaries of parishes and HLCAs. There seem to be two basic patterns worthy of note.
- 5.16 Firstly, as already identified, parishes can be seen cutting across the bounds of HLCAs to maximise their access to a broad resource base. Examples of this can be seen in the area of HLCA 1 (Western Weald), HLCA 2 (Western Greensand) and HLCA 3 (Western Gault Band), and also in the region of HLCA 20 (Romney Marsh) and HLCA 30 (Weald-Romney Border Area). Isolated examples of this can be observed in other areas, especially at the fringes of historically homogeneous areas such as the HLCA 18 (Isle of Thanet) and HLCA 19 (Wantsum Channel).
- 5.17 In other areas the boundaries of the parish and the HLCA run along similar lines. Examples of this include extremely distinctive areas such as HLCA 15 (The Marling Weald) with its marling fields, elements of HLCA 23 (The Forest of Blean) and also HLCA 24 (The North Chalk Downs) where there seems to be a relatively coherent meeting of boundaries.
- 5.18 This divergence between HLTs (which have a certain historical rationale) and parish boundaries (which reflect a millennium of human land-use) emphasises the significant fact that the patterns of human use of the landscape (in Kent expressed in the basic north-south grain of Parish Boundaries) is fundamentally different from the natural form as modified by human activity (in Kent expressed in the east-west grain of HLTs).

Parish boundaries and settlement patterning

- 5.19 Figure 5.3 demonstrates the relationships between identified HLT settlement types and modern parish boundaries. Only significant clusters of settlements were mapped during the project, as it was impractical to map individual houses and buildings.
- 5.20 A few observations can be made. The parishes on the Weald areas all have a central, or very near to central, settlement dating to pre-1801 which tends to hold the name of the parish. There tends to be little other scattered pre-1801 settlement in these areas. To a great extent this apparent pattern is a result of the mapping methodology, since detailed mapping, of, for example, early farmhouses, would certainly show the classic dispersed nature of settlement in the Weald. Unfortunately these smaller dispersed settlements were too small to be mapped as 'settlements' during this project.
- 5.21 Post-1801 these areas see the development of extensive scattered settlement, especially in HLCA 7 (Central Low Weald). In this case the pre-1801 pattern is probably a historical remnant of the origins of these parishes, with the central settlement marking the place where the primary summer settlement was originally established by the downland parishes (e.g. from HLCA 16, Central North Downs) that utilised the Weald areas.

- 5.22 This Wealden pattern is in sharp contrast to the scattered pattern that can be found in the east of the county in areas such as HLCA 24 (North Chalk Downs), HLCA 25 (Eastern Clay-with-Flints), HLCA 29 (Clay-with-Flints North Downs) and the isolated section of HLCA 17 (Northern Horticultural Belt) east of Canterbury. Here early, scattered settlement can be clearly seen with only a few parishes containing just one pre-1801 central settlement. The post-1801 pattern is also different to the Weald areas with considerably less scattered settlement and more urbanisation.
- 5.23 The process of 19th and 20th-century urbanisation is particularly marked in the northern areas of Kent and also on the east-west communication route running from London to Dover and Folkestone and in the railway related growth arising from Kent's individualistic railway development.
- 5.24 A brief examination of Figure 4.11 demonstrates another interesting characteristic of the settlement pattern in Kent. In a number of instances the boundary of the HLCA boundaries are marked by, or are very close to, a linear arrangement of pre-1801 and post-1801 settlement. This can be clearly seen along the boundaries of HLCA 1 and 2 (Western Weald and Western Greensand), HLCA 2 and 3 (Western Greensand and Western Gault Band) and HLCA 20 and 30 (Romney Marsh and Weald-Romney Border Area). These areas are also marked by a grouping of linear parishes (see Figure 5.3) that run tangential to the HLCAs and HLTs in the area indicating the communities' desire to maintain access to a wide variety of resources. The settlements therefore potentially seem to be situated on or very near to the boundaries of these resource groupings.

Conclusions

- 5.25 The project has revealed a complex and varied historic landscape. The data has presented future scholars with a considerable county-wide overview of the development and nature of that landscape. At present the cursory analysis has revealed a few interesting and potentially rewarding lines of enquiry. However, these will need to be followed up and expanded upon if detailed results are to be developed. This will include detailed local analysis beyond the scope of this report.
- 5.26 This future work should also include the analysis of the data in respect to historically situated parish boundaries, and, in particular, an analysis of outlying portions of parishes in respect to HLTs could be very informative.

Chapter 6

Time-depth and Landscape Change

Introduction	1
Time-depth in the Historic Landscape Character approach	1
Commentary on certain Historic Landscape Types and their time-depth characteristics.	2
Historic landscape time-depth to the early post-medieval period	4
Historic landscape time-depth to the early 19th century	5
Historic landscape time-depth to the late 19th century	5
Conclusion	6
Considerations for further research	6

Introduction

- 6.1 The definition of HLTs incorporates some definite chronological thresholds and a number of typological distinctions, which have chronological implications. It was not intended that these should provide the basis for any detailed chronological analysis or sequencing to provide a reliable analysis of the development of the Kent landscape, but some broad patterns can be determined.
- 6.2 The intention has been to distinguish between those areas in which much of the present land-cover patterns have developed prior to the 19th century, and those which have a substantial imprint of 19th century or later change.
- 6.3 Some of the HLTs make it possible to develop initial hypotheses about how far pre-1650 landscape characteristics survive. The characterisation could also be used to develop conservation strategies which would aim to maintain the character of potentially early landscape elements, whilst investigation into their origins and development continues.

Time-depth in the Historic Landscape Character approach

- 6.4 Figures 6.1 to 6.3 provide a sequence of chronologically related ‘viewpoints’. They do not present a picture of the landscape at any particular period, but rather they show areas that may potentially contain identifiable remains of early landscape characteristics, as identified during the study. Obviously they are generalised, in light of the sheer volume of data available, but they are useful in identifying regions and zones where such characteristics could be conserved and examined in greater detail.
- 6.5 Figure 6.1 shows those features most likely to retain morphological attributes characteristic of changes, and developments that may have occurred in the medieval and early post-medieval period, although much of the detail (individual houses in settlements, trees in woods) will probably be more recent.
- 6.6 For Figure 6.2 areas have been added to the Figure 6.1 base that are likely to retain morphological traits characteristic of changes in the post-medieval period up to the early 19th century.
- 6.7 For Figure 6.3 features have been added to the Figure 6.2 base that are likely to retain attributes characteristic of changes that took place during the 19th century, excluding the vast majority of the post-1801 urban development, which is 20th century in origin.
- 6.8 The final version of this sequence is provided by Figure 3.1 which adds largely 20th century changes.
- 6.9 This approach provides an insight into which parts of the Kent landscape may retain the greatest feeling of time-depth, and which reflect more rapid or more radical change.

- 6.10 Some of the ascribed HLT dates that underlie this may, however, be flawed. For example it is very questionable whether all assart field systems need be particularly early (especially HLT 1.3, large irregular assarts with wavy or mixed boundaries). The potential for significant ranges in time-depth within HLT 1.14 (irregular fields bounded by roads, tracks and paths) also needs to be explored on a county-wide basis.
- 6.11 GIS can easily be used to generate such maps, but it should be used as a tool to generate research topics concerning the development of the Kentish field and landscape patterns, rather than as a means of providing the answers to these topics
- 6.12 The scale of the assessment is one of very broad area characterisation. The examination in the field of any part of Kent will potentially reveal early landscape features and elements of considerable interest, even if the predominant characteristics of the area, as identified during this assessment, suggest a significant amount of post-medieval change.
- 6.13 As one would expect, the ‘earlier’ maps are patchier than the later ones, but one of their values is to indicate which areas are likely to display greatest coherence of time-depth. This is especially relevant to development planning through indicating areas which are likely to be particularly sensitive to change.

Commentary on certain Historic Landscape Types and their time-depth characteristics.

- 6.14 Some HLTs have known issues with their historic rationales. These are discussed below, but the resolution of these problems lies outside the scope of this study and requires further localised and detailed examination of particular areas.

Reclaimed marshland

- 6.15 There is a considerable history of marshland reclamation in the county dating back to at least the medieval period in the Wantsum Channel (HLCA 19) and on Romney Marsh (HLCA 20). Unfortunately, it has proved impossible to determine the early extents of fields on purely morphological grounds. The shape and size of the reclaimed areas is not directly related to their date; large rectilinear enclosures (HLT 5.4) could, and do, date from the medieval and modern periods, and the same also applies to small irregular enclosures (HLT 5.1).
- 6.16 Therefore, all HLTs ascribed to reclaimed marshland (HLT 5.1–5.4) have been listed as potentially medieval in date, although some are probably post-medieval in origin.

Assarts

- 6.17 The classification of HLTs 1.1–1.3 (small, medium and large irregular assarts intermixed with woodland) as early features based on their irregular shapes is problematic. The process of assarting has occurred at numerous points throughout history, and it is likely that irregular assarts

have been cut in woodland from the Neolithic until this century. The majority of small irregular assarts identified here, with associated woodland, date from earlier periods (at least medieval), although it is felt that the isolated examples may be more recent in date.

- 6.18 It is unlikely that the current form of HLT 1.4 (regular assarts with straight boundaries) is early in date (i.e. medieval). In places, it could be the result of a rationalisation of earlier assarting rather than a modern form of assarting. Accordingly, for completeness, HLT 1.4 could have been included on Figure 6.1, but it was felt desirable to exclude it at this stage due to the degree of uncertainty within the definition.

Coppice woodland

- 6.19 For the purposes of this study it has been assumed that all coppice woodland is early in date, but this may be incorrect. Coppicing is an ancient craft and is still practised in the modern landscape. Although few new coppices have been planted in the last hundred years it is possible that areas of coppice were planted or converted from woodland within the last two centuries. This slight possibility does not seriously undermine the assumption of an early date for coppice woodland.

Marling pits

- 6.20 Fields containing marling pits (HLT 1.16, wavy bounded fields with ponds; HLT 1.17, large wavy bounded fields with ponds) have been divided in their classification by size, and this same factor has been used to divide them in terms of their date, with small fields, HLT 1.16 (wavy bounded fields with ponds) being ascribed an earlier date and larger fields, HLT 1.17 (large wavy bounded fields with ponds), being given a later date. The earlier date (at least medieval) is broadly acceptable and attested by agrarian historical sources, (see Brandon 1988, 323). However, the division of types is somewhat debatable and the larger types should be considered as being potentially the remodelled remains of earlier field patterns.

Fields predominately bounded by roads, tracks and other public rights of way

- 6.21 This broad category, HLT 1.15 (small fields with wavy boundaries) covers a range of field types under a somewhat difficult heading. With this particular type it is likely that different areas within Kent have different dates for the emergence of this field type. At present there are four main groupings that have been identified (see Figure 4.2):
- *Isle of Thanet* (HLCA 18) The fields here are felt to represent a long-term period of informal enclosure of previously open land throughout the early post-medieval and up to the 20th century.
 - *The Central Downs* (HLCA 16) The fields represented by this HLT would seem to reflect a transhumance pattern of relocation from the downland parishes to the Weald. The orientation of the fields in the HLCA are roughly north-south which corresponds to the direction of this transhumance. It is therefore likely that this orientation of HLT 1.15 is based on relatively early lines and may itself be ancient in nature, perhaps dating to the medieval period.

- *Hoo Peninsula* (HLCA 13) The classification of the fields on the Hoo peninsula is somewhat debatable, but it is felt that these fields are likely to be somewhat more recent in date, perhaps from the 19th and 20th centuries
- *The North Western Foothills* (HLCA 5) The fields identified here are probably 20th century in origin and represent the extensive market gardening activities in the hinterland of London.

6.22 This variety of historical rationales has unfortunately not been reflected in Figures 6.1 to 6.3 and this type is temporarily classified as occurring in the late post-medieval period (Figure 6.2).

Historic landscape time-depth to the early post-medieval period

6.23 Figure 6.1 shows the extent of HLTs determined by the project to be either the remnants of early land use patterns or to possess the potential to contain elements of early land use patterns. In this case Figure 6.1 shows HLTs that date from at least the early post-medieval period.

6.24 Obviously not all of the areas outlined will definitely fall into this category, as the HLTs are too broad in the definition to cover all eventualities (see above for some of the associated issues). The use of morphological characteristics to define age is, at best, a limited approach, and at worse can generate false data. However, in this instance, it is felt that the generated information is of a quality suitable for actual usage and analysis.

6.25 As can be seen Kent possesses a rich variety of early landscape features. Notable groupings include the extensive areas of woodland and coppice on steeply sloping terrain across the central downs and Weald areas. Other significant landscape survivals include the marling pit areas north-west of Romney Marsh and the marshland areas themselves at Romney and Isle of Thanet.

6.26 The pattern of distribution on Figure 6.1 is due to a range of factors. The dense concentrations of potentially early HLTs in the southern half of the county reflect the lack of intensive modern agricultural activity in the area and the associated urban development. It is clear that urban growth and intensive agriculture has had a negative impact on survival, as HLCA 8 (Wealden Horticultural Pocket) and HLCA 11 (Greensand Horticultural Belt) clearly show. Here the hinterland developments of the urban areas have severely reduced the time-depth character of the landscape. Outside these areas there is significant, although partially fragmented, survival across the High Weald area.

6.27 The North Downs (including HLCA 4 (Western North Down), HLCA 16 (Central North Down), HLCA 25 (Eastern clay-with-flints), HLCA 27 (Stour Valley Parkland) and HLCA 29 (Clay-with-flints North Downs) also possess a significant quantity of relict features. These features are primarily situated on the steeper scarp slopes where modern agricultural activity has had minimal impact. Subsequently, they tend to represent secondary agricultural production areas such as coppice woodland and downland.

6.28 Overall, Kent has a remarkable diversity and quantity of early features. The Weald possesses a significant range of surviving elements, mainly related to medieval and early post-medieval

agricultural practice, whilst in the northern half of the county distinctive historic landscape features tend to survive on the poorer quality land, especially woodland and parkland, away from the more intensively worked soils. On these high quality soils, e.g. in HLCA 17 (Northern Horticultural Belt), HLCA 24 (North Chalk Downs) and HLCA 31 (Central Valley Area), intensive farming over the last 200 or so years has removed significant elements of the early landscape character.

Historic landscape time-depth to the early 19th century

- 6.29 Figure 6.2 highlights areas with potential for including, or having characteristics of, the land-use patterns leading up to the start of the nineteenth century. The primary differences between Figure 6.1 and 6.2 are the inclusion of a series of larger field types such as HLT 1.6 (medium to large fields with wavy boundaries), HLT 1.7 (irregular straight bounded fields), HLT 1.14 (irregular fields bounded by roads, tracks and paths) and HLT 1.17 (large wavy bounded fields with ponds) which are associated with the removal of boundaries within previously enclosed fields such as HLT 1.17 (large wavy bounded fields with ponds) and the informal enclosure of previously open land such as HLT 1.6 (medium to large fields with wavy boundaries) and HLT 1.14 (irregular fields bounded by roads, tracks and paths).
- 6.30 One element that does not appear on this map are the early orchards and hop fields that had by the 17th century established themselves in many areas of Kent (Short 1984, 270–80). It has proved impossible to determine the areas, or individual orchards, that might originate in this period. The present highly regulated and rectilinear arrangement of orchards in HLCA 8 (Wealden Horticultural Pocket), HLCA 11 (Greensand Horticultural Belt) and HLCA 17 (Northern Horticultural Belt) probably reflects a 19th century or later arrangement, although the slightly more broken and less homogeneous nature of HLCA 8 (Wealden Horticultural Pocket) may indicate earlier origins for some of its orchards.
- 6.31 Overall the pattern once again reinforces the view that the majority of the Kent landscape has potentially early origins for its basic form and character, although significant elements of it have been radically altered from the late 19th century to the present day.

Historic landscape time-depth to the late 19th century

- 6.32 Essentially all remaining HLTs have been added in this category, bar urban development, industrial activity, recreation and some defensive elements. This may not be entirely correct as one of the dominant characteristics of this map, HLT 1.13 (prairie fields) probably in part originates in the 20th century as the rationalisation of field boundary systems continued. However, the trends of field size growth and the regular nature of the northern part of the county's landscape are visible on this map.
- 6.33 One of the defining aspects of Kent is the lack of parliamentary style enclosure. Although the county contains numerous areas of regular field systems that potentially date from the parliamentary enclosure period there are no significant areas of enclosure. Under the private and

general acts of the late 18th and 19th centuries a total of only some 6000 acres were enclosed between 1740 and 1877 (Tate 1978, 145–7). These were concentrated in the north west of the county and do not survive. No open field systems were enclosed, as no open field systems existed in Kent.

Conclusion

- 6.34 The above should be considered as a series of initial comments concerning identifiable and general patterns in relation to the time-depth aspects of the assessment process. It is not an attempt to present any form of general historic landscape evolution or to chart possible paths of change, as these approaches lie outside of the scope of the data and the report.
- 6.35 What is shown, however, is that based on the project's reading of the historic depth of the HLTs identified during the assessment, Kent has a considerable and visible time-depth to its landscape character. The county is rightly regarded as ancient countryside (Rackham 1986, 3), and elements of the southern part of the county have undergone slow and gradual change since the establishment of permanent settlement. The northern part of the county has undergone more dramatic change in the last two centuries but even here there are still numerous ancient character elements within the landscape.
- 6.36 Particular areas of interest include the reclaimed marshlands, the coppice woodlands, marling pits and the settlement pattern of the Weald. Areas such as the Isle of Thanet are also extremely interesting, with its isolated position and defined borders giving a sense of separation from the rest of the county.
- 6.37 Overall, the HLC has revealed a deep and complex time-depth to the Kentish landscape. Its countywide scale of analysis has produced a context suitable for the pursuit of further studies, perhaps focussed on more localised and individual patterns of HLTs. As well as producing fertile ground for further academic study, the HLC will also be extremely useful in developing strong and coherent landscape conservation and management policies.

Considerations for further research

- 6.38 The Kent Historic Landscape Characterisation covers a very large area in relatively high detail; but to cover the area within a reasonable time frame the analysis inevitably had to be based on a fairly limited number of secondary sources. It would be unfortunate if the clarity of the results were taken as the definitive output for all time. The Characterisation is not a definitive, immutable analysis, and we would suggest that future refinement and research should be based on more detailed research, not merely a re-interpretation of the mapping data.
- 6.39 GIS was used to assist in the analysis of the data, and has proved its flexibility in how the data can be manipulated. In this report we have presented only a few of the maps generated to illustrate particular points of interest or to answer certain questions. Quite apart from its

potential for inter-connectivity with other data sets in the county's GIS, the combination of scaling, layers and spatial units of analysis that we have begun to explore offers a number of possible permutations and combinations. The attraction of the GIS model is considerable to the interactive user, and can not only stimulate new questions, but also swiftly provide answers.

6.40 In many ways, therefore, it is not very realistic for us to suggest particular lines of further inquiry, as anyone using the system will soon develop their own. However, we can suggest a few avenues to add information layers that would have particular potential to enhance the value of the model:

- development of an index to historic map sources by digitising the areas covered by tithe and estate maps held by the County Record Office. This would provide a powerful enhancement of access for local researchers and others
- scanning and 'rubber sheeting' Ordnance Survey field drawings for the One-inch maps, estate and other historic maps and plans to add as raster images. Apart from the possible implications for testing and if necessary leading to revisions of our interpretation, this would have potential for identifying former land uses and features that may be of historical or archaeological interest
- refining the data on settlement origin by adding information on dates from historical sources to data attached to parish and settlement polygons
- adding distribution maps of historic buildings especially linked to the landscape, e.g. Wealden houses, and Oast houses (both of which have a direct relationship to landscape patterns discussed in this assessment).

6.41 The second suggestion outlined above could prove particularly beneficial in the development of a series of pilot study areas designed to testing and improving the local scale usability of the mapping data. By overlaying the HLT data with the raster map data, one can identify areas where there has been substantial survival or decline of historic landscape types, e.g. the now absent heathland belt on the Gault clays in HLCA 31 (Central Valley Area). The analysis of these patterns could be used to determine suitable locations for the implementation of pilot studies to investigate particular local changes in the landscape.

6.42 These investigations would utilise standard landscape history approaches including map regression, place-name analysis, landscape characterisation and settlement pattern analysis. The results could themselves be expressed as HLC mapping for historic periods, and could then be useful in creating a series of characteristic patterns of landscape change through a range of time periods and circumstances. This information could be fed back into the HLT dataset and could prove useful in both academic and conservation / planning fields. The development of an historic atlas for the early modern period would be a most valuable by-product from the project.

Appendix A

Bibliography

Bibliography

- Baker, A R H 1963 The Field System of an East Kent Parish (Deal) *Arch. Cant.* **78**, 96–117
- Baker, A R H 1965a Field Patterns in Seventeenth-Century Kent, *Geography* **50**, 18–30
- Baker, A R H 1965b Some Fields and Farms in Medieval Kent, *Arch. Cant.* **80**, 152–74
- Baker, A R H 1966 Field Systems in the Vale of Holmesdale, *Agric. Hist Review* **14**, 1–24
- Baker, A R H 1973 Field Systems of Southeast England, in *Studies of Field Systems in the British Isles* (eds A Baker and R Butlin), 377–419, Cambridge
- Blagg, T 1982 Roman Kent, in P Leach (ed.), 51–61
- Blair, J 1991 *Early Medieval Surrey: Landholding, Church and Settlement before 1300* Stroud
- Boys, J 1794 *General View of the Agriculture of Kent* London
- Brandon, P 1974 *The Sussex Landscape* London
- Brandon, P 1988 Farming Techniques: South-Eastern England, in *The Agrarian History of England and Wales Vol. II, 1042–1350* (ed. H Hallam), 312–24, Cambridge
- Brandon, P and Short, B 1990 *The South-East from AD 1000* London
- Brooks, N P 1981 Romney Marsh in the Middle Ages, in *The Evolution of Marshland Landscapes* (ed. R T Rowley), 74–94, Oxford
- Campbell, E 1971 Kent, in *The Domesday geography of South-East England* (eds H Darby and E Campbell), Cambridge
- Chalklin, C W 1965 *Seventeenth-Century Kent. A Social and Economic History*, London
- Champion, T 1982 The Bronze Age in Kent, in P Leach (ed.), 31–40
- Clarke, A F 1982 The Neolithic of Kent: a Review, in P Leach (ed.), 25–31
- Darby, H C (ed.) 1948 *An Historical Geography of England Before AD 1800* Cambridge
- Darby, H C (ed.) 1976a *A New Historical Geography of England before 1600* Cambridge
- Darby, H C (ed.) 1976b *A New Historical Geography of England after 1600* Cambridge
- Du Boulay, F R H 1961 Denss, Droving and Danger, *Arch. Cant.* **76**, 75–87
- Du Boulay, F R H 1966 *The Lordship of Canterbury*, London
- Drewett, P, Rudling, D and Gardiner, M 1988 *The South-East to AD 1000* London
- Eddison, J (ed.) 1988 *Romney Marsh: Evolution, Occupation, Reclamation*, Oxford University Committee for Archaeology Monograph **24**, Oxford
- Eddison, J (ed.) 1995 *Romney Marsh: The Debatable Ground*, Oxford University Committee for Archaeology Monograph **41**, Oxford
- Eddison, J (ed.) 1998 *Romney Marsh: Environmental Change and Human Occupation in a Coastal Landscape*, , Oxford University Committee for Archaeology Monograph **46**, Oxford

- Eddison, J 1997 A Landscape of Medieval Reclamation: Walland Marsh, Kent, *Landscape History* **19**, 75–88
- English Heritage n.d. *Register of Parks and Gardens of special historic interest in England. Part 24 Kent* London
- Eve, D 1998 Springhead Gardens and the Archaeology of Kent Watercress Beds *Arch. Cant.* **117**, 191–205
- Eve, D 1999 *A Guide to the Industrial Archaeology of Kent*, Assoc. for Industrial Archaeology, Ironbridge
- Everitt, A M 1976 The Making of the Agrarian landscape of Kent, *Arch. Cant.* **92**, 1–31
- Everitt, A M 1986 *Continuity and Colonization, The Evolution of Kentish Settlement* Leicester
- Fairclough, G (ed.) 1999 *Yesterday's World, Tomorrow's Landscape*, London
- Garrad, G H 1954 *A Survey of the Agriculture of Kent*, London
- Glasscock, R E 1965 The Distribution of Lay Wealth in Kent, Surrey, and Sussex in the Early Fourteenth Century, *Arch. Cant.* **80**, 61–8
- Gray, H L 1915 *English Field Systems* Harvard
- Green, R D 1968 *Soils of Romney Marsh*, Bulletin **4**, Agricultural Research Council, Harpenden
- Harvey, D 1964 Fruit Growing in Kent in the Nineteenth Century, *Arch. Cant.* **79**, 95–108
- Hoskins, W G 1955 *The Making of the English Landscape* London
- Hoskins, W G and Dudley Stamp, L 1963 *The Common Lands of England and Wales* London
- Humphery-Smith, C (ed.) 1984 *The Phillimore Atlas and Index of Parish Registers* London
- Jolliffe, J E A 1933 *Pre-feudal England. The Jutes* Oxford
- Kain, R J P 1974 'The Tithe Commutation Surveys', *Arch. Cant.* **89**, 101–118
- Kain, R J P 1986 'Kent', in *An Atlas and Index of the Tithe Files of Mid-Nineteenth Century England and Wales* 112–125, Cambridge
- Lambarde, W 1576 *A Perambulation of Kent* (reprinted 1970), Bath
- Leach, P (ed.) 1982 *Archaeology in Kent to AD 1500*, CBA Research Report **48**, London
- Margary, H 1975 *The Old Series Ordnance Survey Maps of England and Wales. Vol. 1. Kent, Essex, E. Sussex and S. Suffolk* Kent
- Mate, M 1991a Kent and Sussex (The Occupation of the Land), in *The Agrarian History of England and Wales, vol III 1348–1500* (ed. E Miller), 119–35, Cambridge
- Mate, M 1991b Kent and Sussex (Farming Practice and Techniques), in *The Agrarian History of England and Wales, vol III 1348–1500* (ed. E Miller), 268–84, Cambridge
- Mate, M 1991c Kent and Sussex (Tenant Farming and Tenant Farmers), in *The Agrarian History of England and Wales, vol III 1348–1500* (ed. E Miller), 680–702, Cambridge

- McRae, S G 1973 Geology, in *The Rural Landscape of Kent*, (eds S G McRae and C P Burnham), 9–10, London
- McRae, S G and Burnham, C P (eds) 1973 *The Rural Landscape of Kent* Wye College, London
- Nielson, N 1928 *The Cartulary and Terrier of the Priory of Bilsington, Kent* Oxford
- Nightingale, M D 1952 A Roman Land Settlement near Rochester, *Arch. Cant.* **65**, 150–9
- Nightingale, M D 1953 Ploughing and Field Shape, *Antiquity* **105**, 20–6,
- Page, W (ed.) 1908 *The Victoria History of the County of Kent I* London
- Page, W (ed.) 1926 *The Victoria History of the County of Kent II* London
- Page, W (ed.) 1932 *The Victoria History of the County of Kent III* London
- Pearson, S 1994 *The Medieval Houses of Kent: An Historical Analysis* London
- Quiney, A 1993 *Kent Houses*, Woodbridge
- Rackham, O 1986 *The History of the Countryside* London,
- Reaney, P H 1961 Place-Names and Early Settlement in Kent, *Arch. Cant.* **76**, 58–74,
- RCCL 1958 *Royal Commission on Common Land 1955–58 Report* HMSO Cmnd 462
- Roberts, B K 1987 *The Making of the English Village* London
- Roberts, B K 1996 *Landscapes of Settlement* London
- Short, B 1984 The South-East: Kent, Surrey, and Sussex, in *The Agrarian History of England and Wales Vol VI 1640–1750*, (ed. J Thirsk), 270–316, Cambridge
- Smith, R A L 1943 *Canterbury Cathedral Priory. A Study in Monastic Administration* Cambridge
- Tate, W E 1978A *Domesday of English Enclosure Acts and Awards* Reading
- Tatton-Brown, T 1982 Canterbury and the early medieval towns of Kent, in P Leach (ed.), 79–84,
- Tatton-Brown T 1988a The Churches of Canterbury Diocese in the 11th century, in *Minsters and Parish Churches. The Local Church in Transition 950–1200* (ed. J, Blair), Oxford University Committee for Archaeology Monograph **17**, 105–18, Oxford
- Tatton-Brown, T 1988b The Anglo-Saxon Towns of Kent, in *Anglo-Saxon Settlements* (ed. D, Hooke), 213–32, Oxford
- Talyor, C 1975 *Fields in the English Landscape* London
- Thirsk, J 1967 South-eastern England, in *The Agrarian History of England and Wales Vol IV 1500–1640* (ed. J, Thirsk), 55–64, Cambridge
- Wallenberg, J K 1934 *The Place-names of Kent* Uppsala
- Witney, K P 1976 *The Jutish Forest. A Study of the Weald of Kent from 450 to 1380 AD* London
- Witney, K P 1989 Development of the Kentish Marshes in the Aftermath of the Norman Conquest *Arch. Cant.* **108**, 29–51,
- Wymer, J J 1982 The Palaeolithic Period in Kent , in P Leach (ed.), 8–12,

KENT HISTORIC LANDSCAPE CHARACTERISATION

Yates, N 1994 Kent, in *English County Histories* (eds, C R J Currie and C P Lewis), 208–15, Stroud
Zell, M 1994 *Industry in the Countryside, Wealden Society in the Sixteenth Century* Cambridge

Volume 1: Main report. Showing 1-4 of 14 pages in this report. PDF Version Also Available for Download. Description. This report presents the final results from the Level 1 probabilistic safety assessment (PSA) for the Dukovany VVER/440 V-213 nuclear power plant, Unit 1. Section 1.1 describes the objectives of this study. Section 1.2 discusses the approach that was used for completing the Dukovany PSA. Section 1.3 summarizes the results of the PSA. Section 1.4 provides a comparison of the results of the Dukovany PSA with the results of other PSAs for different types of reactors worldwide. Sect Volume I: Main Report. Page 22. The success rate⁵⁹ for grant applications varied from programme to programme due to different levels of participation. MED had the lowest success rate, with only 5% of proposals awarded. Four programmes had a success rate of around 10% (RO-UA-MD, EE-LV-RU, IT-TN and PL-BY-UA).⁶⁰ Volume I: Main Report. Page 32. ROM reports derive conclusions at programme level from the projects⁶¹ collective performance. For instance, ROM reports indicate that ENPI-CBC programmes are likely to achieve, or even exceed in some cases, their specific objectives and operational outcomes (e.g. LT-LV-BY). Both JMAs and project partners also have positive impressions of effectiveness. IEG Annual Report 2010. Volume 1: Main Report. 2010 The World Bank Washington, D.C. Copyright © 2010 The International Bank for Reconstruction and Development/The World Bank 1818 H Street, N.W. Washington, D.C. 20433 Telephone: 202-473-1000 Internet: www.worldbank.org E-mail: feedback@worldbank.org. All rights reserved. 1 2 3 4 13 12 11 10.Â € Volumes of support to International Development Association countries and Africa have been main-tained; social protection lending has increased but has been concentrated in a few operations. € Development outcome ratings at the World Bank suggest a decline in project outcomes; IFC, mean-while, has maintained its position, but with possible delayed crisis impact.